Lectures
ON THE
PHYSIOLOGICAL PATHOLOGY OF THE BRAIN.

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LECTURE III.—PART V.[1]

ON PARALYSIS OF LIMBS AS AN EFFECT OF DISEASE OF THE MEDULLA OBLONGATA.

Variety of views as regards the place of decussation of the voluntary motor conductors—Facts in favour of each of these conflicting views strongly plead against the others—Each half of the brain can cause voluntary movements in the two sides of the body—Cases of disease of the posterior pyramid, the corpus restiformis, the olivary column, the anterior pyramid alone or in many of these parts, with paralysis on the same side—Experimental facts showing that the anterior pyramids are not the channels of the orders of the will to muscles—Considerable variety in the effects of a section of the lateral half of the medulla oblongata—Variety of symptoms due to pressure on the pons Varolii and medulla oblongata on one side—Frequency of direct paralysis in such cases—The voluntary motor conductors do not decussate exclusively or chiefly in either the pons Varolii or the medulla oblongata.

I NOW pass to another series of arguments. I will study successively each part of the brain, showing, first and chiefly, that considerable lesions can exist anywhere without any marked paralysis; secondly, that a great variety of paralytic effects can arise from alterations of the same part; thirdly, that the so-called non-motor parts of the encephalon can produce paralysis as well as the motor parts. The study of the base of the brain, and especially the so-called motor track in the crura cerebri, the pons Varolii, and the medulla oblongata, gives most decisive arguments against the admitted views as regards the mode of origin of paralysis and the physiology of the voluntary motor apparatus. I will show that paralysis may appear as well, whether the lesion producing it is in the parts not considered as motor, as in those looked upon as motor, in the base of the brain. I will show that paralysis in cases of a lesion in either of these sets of parts may be *crossed* or *direct*, and even that the number of cases in which a *direct* paralysis existed is greater than the number of cases of *crossed* paralysis when the medulla oblongata was the seat of disease or injury. I will show that the greatest variety of paralytic effects can be produced by a lesion occupying the same part or parts of a lateral half of either the medulla oblongata or the pons Varolii. Finally, I will show that in a great many cases considerable lesion has been found in any part of the base of the brain without any evident paralysis of limbs.

The view that a decussation of the voluntary motor conductors going to the limbs takes place in some part of the isthmus of the encephalon is almost universally accepted. Some consider the decussation of the anterior pyramids as formed by all the voluntary motor fibres that pass from one side of the brain into the spinal cord on the opposite side. Such was the opinion I held for a long time. Others consider the anterior pyramids as containing no voluntary motor conductors, and place the decussation of all these conductors in the pons Varolii. A few physiologists, more eclectic than the preceding, consider that not only the medulla oblongata and the pons Varolii, but also the crura cerebri, share in the crossing of the nerve-fibres employed as motor by the will power. It is very remarkable that each of these views, contrary as it is to the others, is, however, in perfect harmony with a number of facts. But the more certain facts harmonise with one of these very various views, the more they bear testimony against all the other views, so that, as this is true for each of these views, it results that none of them can resist the destructive force of the facts on which the others are grounded. The conclusion forced upon us from a careful and unbiased examination of facts is, that a decussation—which is an evident necessity for the action of one half of the brain upon the opposite half of the body—exists all along the base of the encephalon and the spinal cord; so that a lesion in any part of one lateral half of the encephalon may permit a persistence of the action of the will on muscles of the two sides of the body. Another conclusion forced upon us by the facts I shall relate is that one half of the brain can be sufficient for the persistence of voluntary movements in the two sides of the body.

The first series of facts I will bring forward consists of cases in which a lesion of a part of a lateral half of the isthmus of the encephalon has produced a paralysis of the limbs on the corresponding side. I begin with cases in which the lesion was limited to a part or to the whole of a lateral half of the medulla oblongata. It is a very remarkable fact that the number of cases I know of in which a lesion in one side of that nervous centre has caused a *direct* paralysis is notably greater than that of cases of cross paralysis from a similar lesion. There is another important feature in a number of those cases of *direct* paralysis: it is that that loss of voluntary power was due to a lesion in parts of the medulla oblongata which are considered as belonging to the sensitive and not to the motor tracts.

Direct paralysis from lesions of the posterior parts of one side of the medulla oblongata.—For the sake of abbreviation I will only name the author who has recorded a case, and give one or two indications of the principal symptoms relating to the object I have in view. 1. Couty:[2] Incomplete paralysis of the *left* limbs; convulsive trembling of the right ones. *Left* corpus restiformis replaced by a tubercle. 2. Dr. A. T. H. Waters,[3] of Liverpool: Partial loss of power of the *right* arm and leg. Laceration of the *right* restiform body, dividing transversely a good part of the posterior half of the *right* side of the medulla oblongata; a slighter laceration also on the *right* side nearer the nib of the calamus, and a third laceration from the first to the second along the inner side of the restiform body. 3. Dr. Lebreton:[4] Incomplete paralysis of the face, tongue, and limbs on the *left* side. Embedded in the back part of the medulla oblongata and the pons Varolii, a tumour had taken the place of all the posterior parts of the medulla in its *left* half, and extended a little into the other side. 4. Gendrin:[5] Muscular power weaker in the *left* limbs than in the others. Very large hydatid cyst between the cerebellum and medulla oblongata in the *left* side. 5. Hallopeau,[6] in a case under Professor Vulpian's care: Weakness of the *right* side. A cavity inside the *right* half of the medulla oblongata, destroying almost the whole of the restiform body and the lateral column of that side. 6. Dr. R. Mayne:[7] Loss in great measure of power of motion in the *left* arm (the two legs were paralysed from disease of the dorsal spinal cord); later on the *left* arm was completely paralysed, and the right partially so. A tumour of the size of a kidney-bean was embedded in the *left* half of the medulla oblongata. 7. Parent-Duchâtelet and Martinet:[8] Considerable weakness of the *left* side, gradually increasing, but later on amelioration. The *left* half of foramen magnum greatly narrowed by a tumour pressing on that side of the medulla oblongata. 8. Gama:[9] Complete paralysis of the arm and leg on one side. Two tubercles, of the size of a nut, one close by the other, pressing on the medulla oblongata near the foramen magnum, on the side of the paralysis. 9. Dompeling:[10] Paralysis and atrophy of the *right* arm and leg; the entire left side strong and well-nourished. A tumour occupying nearly the whole of the *right* half of the medulla oblongata. 10. Andral:[11] Complete paralysis of the *left* arm, notable loss of power of

[1] For Parts III. and IV., see THE LANCET, Oct. 26th and Nov. 2nd, 1878.

[2] Gazette Hebdomadaire de Médecine (Paris, Juin, 1877), p. 411.

[3] Medico-Chirurgical Transactions (London, 1863), vol. xlvi., p. 115.

[4] Bulletins de la Société Anatomique (Paris, 1867), p. 447.

[5] Quoted by Romberg: A Manual of the Nervous Diseases of Man, translated by E. H. Sieveking (London, 1853), vol. ii., p. 305.

[6] Des Paralysies Bulbaires (Paris, 1878), p. 98.

[7] Dublin Hospital Gazette, May 15th, 1861; quoted by Dr. E. Meryon: Practical and Pathological Researches on the Various Forms of Paralysis (London, 1866), p. 126.

[8] Recherches sur l'Inflammation de l'Arachnoïde (Paris, 1821), p. 471.

[9] Traité des Fièvres de Tête (Paris, 1830), p. 264.

[10] Archives of Scientific and Practical Medicine (New York, 1873), p. 137.

[11] Cliniques Médicales, already quoted, vol. v., p. 131.

the *left* leg. Disease of atlas and axis, and pressure by displaced odontoid process on the *left* half of the medulla oblongata, reduced to a pulp. 11. Luneau :[13] Slight *left* hemiplegia, with notable ataxy in the *left* arm. Embolism of the *left* vertebral artery and *left* posterior cerebellar artery; softening, ascertained by Professor Charcot, in many parts of the *left* half of the medulla oblongata. 12. Penard :[13] Incomplete paralysis of the *left* limbs. A tumour the size of a very small egg under the *left* side of the medulla oblongata and pons Varolii, from the middle line to the *left* crus cerebelli. 13. Berger :[14] Paralysis of the *left* arm. Clot in the *left* vertebral artery. 14. Dr. W. H. Dickinson :[15] Paralysis of the *right* limbs, more complete for arm than leg. Coagulum adhering to lining of the *right* vertebral artery and basilar artery. 15. Fabre :[16] Paralysis of the *left* limbs, rigidity of the right limbs. A small clot in centre of the *left* anterior pyramid.[17]

Here are, then, fifteen cases in which there was paralysis on the side of the lesion, whether the alteration was in the corpus restiformis, in the lateral (or olivary) column, in the internal part of the lateral half of the medulla, in the anterior pyramid, or in several or all of those parts. Are we to believe that paralysis appeared in each and all these cases owing, as the received doctrine requires, to the loss of function of the part diseased? If so, we would have to admit that in several of these cases the conductors for voluntary movements passed in the corpus restiformis and the posterior pyramid, in several others in the lateral columns, in other cases in the whole lateral half, including the anterior pyramid, and in one case in this pyramid itself. We would also have to admit that in these fifteen cases the orders of the will to muscles passed in the half of the medulla on the side of the parts to be moved!

It may be, however, that the physiologists who believe that the conductors for voluntary movements decussate higher up than the medulla oblongata, would say that these facts agree with their experiments which prove that the anterior pyramids are not the channels for the orders of the will to muscles. I will soon give peremptory arguments against the view that the voluntary motor conductors decussate in the pons Varolii; but, for the present, it may be well to glance at the state of the question of decussation of the anterior pyramids, as far as experiments have thrown light upon it.

Magendie[18] was the first to show that the anterior pyramids can be divided without any marked paralysis being produced. Moritz Schiff[19] has repeatedly made that experiment, and drawn from what he has witnessed even more absolute conclusions than those of Magendie. He denies that these pyramids have a share in the conveyance of the order of the will to muscles. Professor Vulpian,[20] with Dr. Philipeaux, performed another experiment. He made a longitudinal incision on the middle line so as to divide all the decussating fibres of the anterior pyramids. Notwithstanding the weakness, depending on the inhibitory influences of a section of the nib of the calamus on the respiratory movements and on the action of the heart, he found that voluntary movements persisted, and that walking sometimes was possible. I have performed a great many experiments on the anterior pyramids. For a long time the clearest result I had obtained was that some degree of a cross paralysis was produced by a transversal section of one pyramid. Since the publication, in 1861, of the results of my former researches, I have sometimes seen just the reverse—i.e., a direct paralysis. My most recent experiments show that it is very rare that one pyramid can be cut without a paralysis of one or two limbs, but that there is a great variety as regards the seat of the paralysis, which may be in one, in two, in three, or in the four limbs. I have ascertained that when there is a paralysis it is never complete, even when both pyramids have been divided transversely. I have found also that after this section of the two pyramids there is often only a paralysis of one limb.

If one of the restiform bodies is divided in a dog, a rabbit, or a guinea-pig, there is very frequently a slight paralysis in one or two limbs, and almost always on the corresponding side. The same result is obtained if the olivary column of the medulla is divided. There is more often a notable paralysis after a division of the posterior half of one side of the medulla than there is after the division of one of the anterior pyramids.

As regards a transversal section of a lateral half of the medulla, the results obtained by the various experimenters are absolutely conflicting. Still I find that all these results can have been observed, because each of them will sometimes occur. The only fault of those experimenters has been to think that what they saw was the constant rule. After a lateral hemisection of the medulla oblongata, Prof. Vulpian and Dr. Philipeaux[21] have seen that there was no evident paralysis; while Magendie,[22] Flourens,[23] Lussana and Lemoigne,[24] have found a direct paralysis, as was observed in men in the fifteen cases I have mentioned. On the other hand, Lorry[25] found that there was a cross paralysis, and Calmeil[26] paralysis on the two sides. I repeat that I have witnessed all these different effects, but I can affirm that the most frequent by far is a marked paralysis on the corresponding side, with some slight degree of palsy on the opposite side. That there is a weakening effect on the two sides is also, I must say, an almost constant result. The most rare effect of all consists in a greater paralysis on the opposite than on the corresponding side. I ought to state, however, that the proper appreciation of the paralytic symptoms is frequently difficult on account of a great tendency to rotatory movements.

The excessive variety of effects after a section of a lateral half of the medulla oblongata in animals is observed also in cases of lesion of such a part in man. I may go further, and say that, as I will fully show hereafter, there is still more variety in man. Other parts near the medulla show also a great variety of effects. When, for instance, a pressure is exerted by a tumour on one side of the anterior surface of the pons Varolii and of the medulla, the symptoms produced vary exceedingly. Paying only attention here to the paralytic effects, I will say that out of 181 cases of tumour of the base of the brain, in which there was pressure chiefly on the crus cerebelli, the pons and part of the medulla, there were the following most various effects :—

1.	No evidence of paralysis in	56 cases
2.	Paralysis of two limbs on side of lesion in	37 ,,
3.	Paralysis of arm only on side of lesion in	3 ,,
4.	Paralysis of leg only on side of lesion in	1 ,,
5.	Paralysis of both limbs on opposite side in	21 ,,
6.	Paralysis of arm only on opposite side in	8 ,,
7.	Paralysis of leg only on opposite side in	4 ,,
8.	Paralysis of both legs (paraplegia) in ...	23 ,,
9.	Paralysis of both arms in	1 ,,
10.	Transverse paralysis (left arm, right leg) in	1 ,,
11.	Paralysis of three limbs in	4 ,,
12.	Paralysis of limbs, side lesion at first, and later on of those on opposite side, in	2 ,,
13.	Paralysis of the four limbs in	20 ,,
	Total	181 cases

So that for a lesion which, although variable in extent, was constantly the same in this respect, that it produced at first a pressure on the anterior surface of one side of the pons Varolii, and, after a time, on the neighbouring parts on the same side (crus cerebri, crus cerebelli, medulla oblongata, and cerebellum), there was the greatest variety of effects: in 56 cases no marked paralysis, and in 125 cases paralysis of one, of two, or of three or four limbs. Adding the cases (37) of paralysis of two limbs to those of paralysis of the arm (3) or leg (1) alone on the side of the tumour, we find that out of 125 cases of paralysis there were 41 in which it was direct, while the number of cases of cross paralysis was only 33 (21 of two limbs, 12 of one). If to the 41 cases of

[13] Comptes Rendus de la Société de Biologie (Paris, 1870), p. 132.
[13] Bulletins de la Société Anatomique (Paris, 1846), vol. xxi., p. 389.
[14] Bulletins de la Société Anatomique (Paris, 1869), p. 188.
[15] St. George's Hospital Reports (London), vol. i. 1866, p. 261.
[16] Quoted by Gintrac, loc. cit., vol. vii., p. 373.
[17] In a case of Dr. Charcot's (in Hallopeau's thesis, Des Paralysies Bulbaires, Paris, 1875, p. 104) the basilar artery and the *left* vertebral artery were obliterated; there was paresis of the two arms, the *left* especially.
[18] Précis Elémentaire de Physiologie, 4ème edit. (Paris, 1836), vol. i., p. 415.
[19] Lehrbuch der Physiologie des Menschen. (Lahr, 1859), p. 306.
[20] Leçons sur la Physiologie du Système Nerveux (Paris, 1866), p. 492.
[21] See Professor Vulpian's thesis: Essai sur l'Origine des plusieurs paires de Nerfs Craniens (Paris, 1853), p. 54.
[22] Leçons sur la Physiologie du Système Nerveux (Paris, 1839), vol. i., pp. 285 and 293.
[23] Recherches Expérimentales sur les Propriétés et les Fonctions du Système Nerveux, seconde édit. (Paris, 1842), p. 111.
[24] Archives de Physiologie Normale et Pathologique, vol. ix., 1877, p. 381.
[25] Mémoires des Savants Etrangers de l'Académie des Sciences, vol. iii., p. 375.
[26] Journal des Progrès des Sciences et des Institutions Médicales, vol. xi., 1828, p. 100.

direct paralysis we add the 2 in which the limbs on the side of the tumour were first seized, the 23 cases of paraplegia, the case of paralysis of both arms, the case of transverse paralysis, and the 4 cases of paralysis of three limbs, we find 31 cases in which there was a *direct* together with a *cross* paralysis; so that, adding now these 31 cases to the 41 in which there was only a direct paralysis, we find that there were 72 cases in which a direct paralysis existed, either alone or with a cross paralysis. As there were in all 125 cases of paralysis, and as we put aside, for obvious reasons, the 20 cases of paralysis of the four limbs, only 105 cases remain, out of which there were 41 of mere direct paralysis, 33 of mere cross paralysis, and 31 in which there was a direct and a cross paralysis.

Can the variety of anatomical organisation of the anterior pyramids pointed out by Flechsig[27] throw any light on such facts? It would be vain to attempt explanations grounded on anatomical structure, as such a variety of disposition of conductors as would be necessary to explain the variety in paralytic effects of a tumour pressing on the pons Varolii would be irreconcilable with the lack of great variety of paralytic effects in cases of lesion of the cerebral lobes and the basal ganglia—cases in which there is hardly more than one example of direct paralysis out of 500.

If now we examine the significance of the two sets of facts I have mentioned—those relating to the medulla oblongata, and those relating to a pressure on the anterior part of the pons Varolii,—we find in both sets the same preponderance existing for cases of direct paralysis over cases of cross paralysis. If, therefore, it were possible to accept that direct paralysis is frequent in cases of disease of the medulla oblongata because, as supposed by Lussana and Lemoigne, Schiff and others, the decussation of the voluntary motor conductors takes place in the pons Varolii and not in the medulla, we would have at once a mass of facts in opposition to that view in the forty-one cases of direct paralysis in which the cause was a lesion of the anterior surface of the pons Varolii. For that reason, and for others to be related hereafter, we must reject the view that the voluntary motor conductors have their crossing in the pons Varolii, as we have already rejected the supposition that this crossing takes place in the medulla oblongata.

[27] Die Leitungsbahnen im Gehirn und Rückenmark des Menschen Leipzig, 1876), *passim*.

Clinical Lecture
ON
A FORM OF TREMBLING PALSY.

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WE have, just now, in the clinical wards, some cases of nervous disease in which the mental soundness of the patients is severally in question. In them we shall find points of interest of many kinds. Indeed, there are all sorts of interests in such disease. First, and not the least engaging, is the refined sort of questions that arise when we come to inquire whether they are diseases of the mind or of the body. Here let me, however, warn you off metaphysics; for such questions soon become metaphysical if we are not careful, and may thus reach emptiness, and expand into dreadfully large books, full of nothing that can do anybody the least good. We will dismiss metaphysics as much as we can. Metaphysics is one of those things that are meant by Nature for a man's own inside, and which it is a sign of weakness to bring out. That is, of course, unless you are an immense metaphysical genius; which, however, I very humbly regard as a kind of monstrous mental ectopia case —*extroversio mentis*,—due, I think, to a fault somewhere where the two sides of all those questions should have met in a sort of median line, and shut the whole affair into the person's mental interior.

Nevertheless, we are obliged to ask, in such cases as those before us, Is it the mind, or is it the body, that is at fault? For we live under the necessity of distinguishing, for all practical purposes, between the mind and the body, and especially between diseases of the mind and diseases of the body. And you know, as well as I, that the highest philosophy that is at all intelligible, or, at any rate, comprehensibly utterable (which, in metaphysics, is not quite the same thing), is dual—that is to say, it is obliged to admit a substratum of material phenomena, and another distinct substratum of mental phenomena; no one showing any way of identifying these substrata, except it be in that most grand and true generalisation which has been thus uttered—"The individual and the universal are one": a generalisation which I believe is beautifully true, and would be universally accepted, only that each individual wants to read it thus—"The individual and the universal are one, and I am that one"; which no other individual will ever allow—not even Carlyle's poor shoeblack. Hence this mighty and true generalisation is not of much account between man and man in what is justly called "common sense." (Note that "common sense" does not mean vulgar or ordinary sense, but the sense that is capable of being common to two or more of the individual-universals which we call men.)

The notion that the individual and the universal are one, although it does not go for much in common sense, is far from being a rare piece of mental furniture: in fact, it is very common and vulgar; it may be said to be the incentive of all vulgarity; and when it grows to great excess it appears as evidence of some diseases—of some diseases which we have to consider now—of general paralysis and of hysteria in particular. The disposition to regard their own *ego* or self or individuality as the culminating point of the universe is characteristic of these states more or less. With general paralytics this exaltation is a matter of the knowing faculties; with hysterics it is rather a matter of feeling. Hence you will not be surprised to find that the former, for the most part, troubles the male sex, the latter the female. And often the first appearance of the morbid excess of self which characterises general paralysis, or which is exaggerated into hysterical mania, is so gradual that it is not recognised in the earlier stages by friends, nor at first even by the medical attendant. The approach of general paralysis of the insane is subject to some variety in different cases.

In No. 7, John ward, we have an example of what, I fear, we must certainly regard as such general paralysis. This is shortly the account we have of our patient. There is nothing in the family history indicating predisposition to nervous disease. He was a seaman in the navy for twelve years, and is now thirty-three years old. Ten years ago, whilst his ship was in action in the war with Satsuma, a Japanese shell exploded behind him and "blew him up," he says. His left ear bled; and since that time he has been liable to headache, and has had tinnitus. He afterwards incurred a bubo. He remained in the navy five years after his injury; then worked in a brass-foundry, where, he says he was poisoned with mercury, and suffered with relaxation of the bowels. He was next in the employ of the Post Office for two years, and lastly was a tideman for the past twelve months. This is his account of himself. But it varies seriously in several versions of it that he has given; and he is quickly confused. His wife says he has become terribly irritable of late, and she is afraid of him; she also says he tells unaccountable falsehoods. For the last two months he was an out-patient at a hospital, complaining of incessant diarrhœa, which proved to be quite a delusion. He is a well-nourished man. His hands, though powerful, are trembling. He looks healthy in texture. The pupils of his eyes are unequal. His tongue jactitates and trembles as it is protruded, and his speech is faltering and intermittent. His mind wanders oddly at times as he is speaking. He has, too, an exaggeratedly jovial manner, poor fellow! He still maintains that he has extreme diarrhœa, but on proper examination no such condition is found; the motions are solid and natural. His memory is very bad. His ways are occasionally seriously indecent. He gets up and steals food out of his neighbours' lockers.

Now, the case of this unfortunate sailor offers some points of interest, and some points also of difficulty. There is a clear history of injury to the head, with one symptom suggesting fracture of the skull. We might also ask the question whether his account of venereal trouble, which only confessed a bubo, can be taken as evidence of his having had syphilis. Again, the statement that he had mercurial trembling—for that was what he said—would set us to com-

pare his present agitation with mercurial tremors. Either of these three conditions is capable of causing nervous symptoms, which might possibly be mistaken for general paralysis. But I will not dwell on them. The first and third are too remote to be regarded as directly the cause of his present symptoms; and as to syphilis, this, even if proved, which it is not, would, as well as the other two occurrences, be set aside practically by the consistency of the symptoms with each other, so far as they go. They are too positively characteristic of general paralysis of the insane; whereas cerebral syphilis is especially known by the irregularity and lack of consistency of its manifestations.

After all, however, the stage of the complaint is early; his gait is not affected, and the degree of disturbance noticeable is but slight at times. And we must not get the impression that general paralysis of the insane is easy to recognise in its early stages. Rather, I should say, it is never safe to recognise it in a hurry. It is better to observe the patient upon more than one occasion, if possible, before you come to a conclusion. You should not get general paralysis too much on the brain, or you will, perhaps, after inwardly or outwardly accusing some of your livelier friends of it, be punished by accusing yourself in the same way also. And I fear you would be aided towards such an unfortunate alarm by reading the descriptions of the earlier symptoms of general paralysis as given by some of the leading specialists in insanity. In fact, the specialists in insanity do not seem always to maintain a quite clear idea of general paralysis. And in going round some asylums you will often find that any case wherein weak intellect is associated with paralytic phenomena is put down as general paralysis of the insane. This, however, does injustice to the definite character for recognition, of which the description of that disease is desirable and useful. And a like injustice is done to the definiteness of the disease by such a description as that given in the excellent article in Dr. Reynolds's System of Medicine. In this article Dr. Maudsley says: "When the patient speaks earnestly he does not articulate exactly, and there is a certain hesitation or thickness detectable in his utterance. When the tongue is put out, which is done with difficulty, there is a fibrillar quivering or trembling of its muscles, but it is not pulled to one side. There is tremulousness also in the muscles of expression when put in action, especially those of the lips, which quiver as in one just about to burst into tears. These phenomena, which are of fatal omen," &c.

Now this, coming from Dr. Maudsley, must be good teaching; but let me warn you not to take it too literally, lest you should be in danger of attributing general paralysis to your friends right and left. I will take the liberty of suggesting a few notes to the passage I have just quoted, that you may put them in your copy if you have one. But you need not buy a copy on purpose, it is one of such large books. I think, if Hippocrates were alive now, and about to begin his aphorisms, those famous pathetic touches would take rather this form: "Vita brevis. Lingua longa. Experientia loquax." That is, if there was such a word as the last, and if he talked Latin, as many appear to suppose him to have done. First notice, in the passage I have quoted, the learned author says, "When the patient speaks earnestly, he does not articulate exactly." Now, I would advise you to insert in your copy the word "not" before earnestly; or, for the sake of style, you may write it, "When speaking under conditions not such as to call for unusual earnestness, he does not articulate exactly." For it is then that the matter is serious. The point to fix attention on is that the patient is obliged to appear tremulously earnest over his utterance of remarks not calling for earnestness at all. You must not be led to suppose that because a person when very earnestly speaking is tremulous in utterance, therefore he has general paralysis of the insane. This is not so, and never was. Let me read you what Seneca says to his friend Lucilius as to the habit of some people in their speech: "Quibusdam tremunt genua dicturis. Quorumdam dentes conliduntur, lingua titubat, labra concurrunt ..... natura ..... illo vitio sui etiam robustissimos admonet." Or remember your first utterances at the Physical Society. As a second note, observe that our author says, "When the tongue is put out, which is done with difficulty, there is a fibrillar quivering or trembling of its muscles, but it is not pulled to one side." Now, it is very important for you here to take notice that fibrillar quivering or trembling of the muscles of the tongue is a very common thing indeed, and is frequently seen in persons when they are being at the time passed as first-class lives for insurance by the most experienced physicians. Such fibrillar quivering is of no more significance than the slightly phosphatic or oxalic urine which usually accompanies it. Note, then, in your copy that it is when the tongue quivers tremblingly as to its bulk, not its fibrils, so that it is protruded with some effort whilst shaking and quaking *en bloc;* it is then that the sign assumes importance, especially when associated with unmeaning emotional-looking quivering of the lips in ordinary conversation.

I am sorry to appear tedious, but before Dr. Maudsley's conclusion of "fatal omen" can pass, you must put in at least two more notes. The first of these is to insert the words "and if he is not drunk." Do not despise this caution nor think it unrefined and unnecessary, for drunkenness does not in all persons produce ordinary delirium tremens or "horrors." In some few persons it produces effects so exactly like general paralysis that there is no way of saving yourself from an error except care in considering the circumstances of each case, and determination not to conclude hastily—that is, not to conclude until you are sure that the patient has been kept from liquor. Otherwise you may send a man to an asylum, and he shall be sent out after a few days' separation from his beloved intoxicants, and then bring an action against you for heavy damages.

The other and last note would be this: "And if he has not been afflicted in the foregoing manner congenitally, or under circumstances showing his development to be at fault." On this point I will ask your attention to cases that have come under my notice, one of which you have in the ward now, and which cases agree in this, that the patients show paralytic tremor and impeded utterance very like to general paralysis of the insane. So like, indeed, that, in one example, the poor man, whilst quite sound in mind, had been confined for some time in a lunatic asylum, and narrowly escaped a second incarceration. This case was shortly as follows: ———, aged about forty, from his infancy had great impediment in his speech and very awkward gait, so that he was regarded as strange and of weak intellect. He had deficiency of control over his movements, and over the muscles of expression; his lips quivered in speech, and his lingual letters were slurred. He probably would have been allowed his freedom, but he inherited a little money, and his friends felt that this wanted looking after better than he could look after it, so he was placed in a lunatic asylum and made a ward in Chancery—on the grounds, as far as I could gather from the certificates, that he looked imbecile and gave away his money profusely—even sixpence at once to a beggar, it was said! After he had been in the asylum some time he was discharged, as the proprietor found him sane. But he remained still under the Vice-Chancellor's supervision, and was visited by Commissioners in Lunacy. He did not like these gentlemen. They offended him by asking before him after his health from his landlady, whereas he thought he might reply on this point for himself. One day the Commissioners came to the garden-gate whilst the poor man was trimming a hedge with a "bagging-hook," and he walked towards them with very good intentions, but with the bagging-hook in his unsteady hands, and with his imperfect gait and ill-governed countenance, meanwhile not really liking them. The consequence was that the Commissioners grew apprehensive of some serious misunderstanding, and gave orders for his confinement. Further consideration of the case was, however, very kindly accorded by them, and the poor man is still, I believe, free. If you have patience enough to understand him, what he says is sensible. These were his words to me: "I am sorry to say I have not the same strength in my legs as other people, but I don't think it affects the head at all. I always had a difficulty—rather a sort of impediment—in my speech; but I don't think I ramble much, Sir." And as to the visits: "No doubt, Sir, the gentlemen are only doing their duty, but many people would not like it, and I am not peculiar in that, am I, Sir?" So that of his relation with the Commissioners he took a quite clear and correct view; and in any relation between men he is really the most intelligent man in the matter who takes the most clear and correct view of the relation, whether he be, as a personage, the lower or the higher.

Such a case as this is by no means peculiar or even exceedingly rare. The fact is that the poor man in question is one of a series of cases which should be recognised, and in our men's ward we have an example of the disease which

I would advise you to look at carefully. It is, shortly, as follows:—Robert S——, aged twenty-one, a clerk, until fourteen years of age healthy; since fourteen he has been gradually reaching his present miserable state, which may be thus described:—He cannot stand steadily, and walks in a trembling, tottering manner; his unsteadiness is but little increased when he shuts his eyes; movements cease when he lies down and the limbs are supported; his face lacks expression, and his attempts to speak usually cause some quivering of the lips; his words are slurred, syllables run into each other, much as if he were slightly intoxicated; his tongue, when protruded, is steady, except for fibrillar quivering. Thus, his state would correspond with the description of general paralysis of the insane, but it nevertheless is not at all of that kind. It has lasted too long. The mental faculties are very fair. But if you want proof how far remote it is from general paralysis, you must hear his curious family history. He is one of seven children of a respectable tradesman. There was no consanguinity of parents; there is no sign of hereditary syphilis. The parents were fairly well off. Three of the children have grown up and continued healthy people, but it is otherwise with four of them, of which four he is one, and the other three of this four are all afflicted in the same way as he is. They differ from him only in the stage of the disorder. The eldest of them is a man thirty-six years old, the second a woman of twenty-six; the first of these has been twenty-two years, the second twelve years, in the disorder. These two can only get about with great difficulty, but their condition has not grown worse for some years. A brother younger than our patient—aged, I think, seventeen—is the fourth of these unfortunates. He is just beginning to be seriously troubled with the same set of symptoms, which must shortly make him, from what he appears—a tall, well-built, hearty lad—into a paralytic wretch like our patient. Having seen them all, I find the cases identical in all the points above-named, although the persons differ in complexion, stature, &c., just as much as is usual in families. I do not know at all certainly what is the change that has overtaken the nervous centres in so many of this unhappy family at the same age in each. But, whatever it is, the condition of the sufferers is the same as that of the poor man of small property whom it was found most convenient to treat as a lunatic, and whose case I have just stated.

If time allowed, I could give you other cases of the same kind. They are, as you have seen, so like general paralysis of the insane as to run great risk of suffering injustice at the hands of the authorities. They are also very like insular or disseminated sclerosis; I prefer the term "insular," because the word "disseminated" carries, to my mind, the idea of small scattered things, whereas the patches in sclerosis are islet-like areas of often large size: you would hardly call half-crowns on the palm of your hand "disseminated." They are also like locomotor ataxia: the quasi-lunatic was described by the Commissioners as having locomotor ataxia. But they differ from general paralysis in the intelligence being retained; the muscular tremors or jactitations are more considerable, and the course of the case is quite different and much more protracted. They differ from insular sclerosis in there being much less mental enfeeblement than is met with in sclerosis; also in the muscular tremor being rather choreiform than oscillatory—choreiform, not choreic: it is known at once from chorea by the movements ceasing when the limbs are supported. From locomotor ataxia they are distinguished by the implication of the apparatus of speech, and by the absence of the pains and numbness of ataxia. Again, from all these they are distinguished by the circumstances and the course of the disorder. My object in this lecture is to direct your attention to such general paralytic enfeeblement closely resembling the diseases I have named in association with it, and having the characters described in the cases I have given; and I believe you will find yourselves repeatedly meeting with this disorder if you are ready to recognise it.

As to the treatment of this particular type of disease, I have seen no good whatever—that is, no specially curative good—from any treatment. Like so many chronic nervous diseases, they generally fall, at least for a good long time—good, that is, for the electrician—under some medical electrician, who may attract them by means of a continuous current of advertisements of his books and cases in the press and medical societies. The electrician's proceedings are impressive, and the poor creatures are always touchingly ready to suppose themselves to be improving; but no real good is ever done in any such case when once the case has become so pronounced in character that its correspondence with the above type of disease is certain.

A VERY RARE CASE OF

INTRA-CAPSULAR FRACTURE OF THE NECK OF THE FEMUR,

WITH GREAT FLEXION, ADDUCTION, AND INVERSION OF THE LIMB.

BY WILLIAM PIRRIE, M.D., LL.D. EDIN.,

SURGEON IN SCOTLAND TO H.R.H. THE PRINCE OF WALES, AND PROFESSOR OF SURGERY IN THE UNIVERSITY OF ABERDEEN.

WIDOW M——, a thin, pale, weakly-looking woman, eighty years of age, was admitted into one of my wards in the Aberdeen Royal Infirmary on Monday, the 14th of October last, having sustained a severe fall on the lower part of her back and right hip, caused by tripping on a door-mat and falling upon a bare hard floor, the accident having happened two days previous to her entrance into the hospital.

The patient was admitted at the conclusion of the visit on Monday, and stated to me on Tuesday, that since the occurrence of the accident she had suffered intense pain in the region of the right hip, that the limb had remained immovable in the same position, and that her urine and fæces had been passing off involuntarily.

Before bringing the patient under the influence of chloroform, with the view of making a thorough examination, I observed that she could only lie on her back inclined to the left side, with the right thigh so much flexed, adducted, and inverted, that her right knee lay high up in the left lumbar region, that the outer aspect of the thigh looked directly forwards, and that it was necessary to support the right foot by means of a pillow in order to prevent its falling down and thus rotating the thigh outwards, which caused excruciating pain at the hip-joint. (A glance at Fig. 1 will

FIG. 1.

make the attitude of the limb intelligible.) From the lower part of her back and posterior aspect of the right hip a portion of skin about the size of the hand had been removed by the fall, and a black, gangrenous slough had formed on the denuded part. When the examination had proceeded thus far, I thought that this case was probably an example of that peculiar dislocation of the hip-joint described by

Bigelow, and delineated by Fig. 13, page 63, of his most interesting work on "Dislocations and Fractures of the Hip-joint," a copy of which figure is here inserted. The

FIG. 2.

patient having been brought under the influence of chloroform, I easily traced with my finger the outline of the trochanter major, and found that its upper border was directed downwards and backwards. I could not discover the ball of the femur, and therefore came to the conclusion that it remained in the acetabulum. On rotation of the thigh, the trochanter major did not describe the segment of a circle, as in a dislocation, but was observed to revolve on its own axis, as in fracture of the neck of the thigh-bone, and during rotation slight crepitation was elicited. From the above symptoms, I was convinced that this was a case of fracture of the neck of the femur with flexion, adduction, and inversion of the limb, a variety of fracture not hitherto described, as far as my reading has enabled me to judge. Having formed this opinion, I reduced the fracture by taking hold of the knee with one hand and the foot with the other, by placing the leg at a right angle to the thigh, by abducting, rotating outwards, and bringing down the limb by the side of the other—in short, reduction was accomplished by practising the last three movements adopted by Bigelow for reduction of dislocation of the head of the femur on the dorsum of the ilium. When the limb was thus brought into proper position, it exhibited no tendency to eversion or inversion, and there was scarcely any appreciable shortening.

For the first twenty-four hours following reduction the affected extremity was kept at rest by placing a long sand-bag by the side of the patient's trunk and limb, and afterwards by applying to the outer side of her pelvis, thigh, leg, and foot a long splint, composed of long broad bandages charged with plaster-of-Paris, and moulded into the shape of a Desault's splint. The test-line of the ilio-femoral triangle, shown by Bryant to be so valuable for enabling the surgeon to arrive without excessive manipulation at a reliable diagnosis in fractures of the neck of the thigh-bone and Nélaton's test-line for dislocation of the head of the femur backwards, were not available in this case, owing to the extraordinary position of the femur; but the already described symptoms produced a decided conviction in my mind that the case was one of fracture of the neck of the thigh-bone with the limb in a position which I had never before seen in any example of that injury, and the post-mortem examination made six weeks after the reduction of the fracture proved that my diagnosis was correct.

From the moment that the limb was made straight the patient remained perfectly free from pain in the hip, but frequently complained of pain at the knee, which was perfectly sound. This pain was chiefly seated within and at the inner side of the joint—a symptom so common in morbus coxæ,—sometimes misleading an unwary surgeon, but rarely, if ever, met with in injuries of the hip-joint, judging from my own experience. If the conditions in which this symptomatic pain is experienced be disease at the filamentous terminations of one branch of a nerve, and the pain reflected to the terminations of another branch of the same nerve, conditions furnished by the anterior branch of the obturator nerve supplying the hip, and the posterior branch the knee-joint, it is difficult to understand why the symptomatic pain is experienced so severely and frequently at the knee in disease, and so rarely, if ever, in painful accidents, of the hip-joint.

Six weeks after the application of the plaster-of-Paris bandage-splint, and three days before the death of the patient, the splint was removed, and the limb remained straight, without any tendency to eversion or inversion, and there was no appreciable shortening.

Notwithstanding the occasional and unavoidable contact of urine with the denuded surface on the patient's back, which was covered with a large gangrenous slough on her admission, by the application of turpentine, carbolic, and other dressings, and the removal of all pressure by means of a water-pillow ring filled with air, the slough eventually was removed, and granulations made some advancement; but these attempts at healing were fruitless, owing to the great weakness and age of the patient. The weakening effects of this large sore, together with amyloid degeneration of the kidney, caused death fifty days after the occurrence of the injury.

The post-mortem examination was conducted by Dr. Rodger, pathologist to the Aberdeen Royal Infirmary, who found that the capsular and ilio-femoral ligaments were perfectly entire, the latter being thicker and stronger than usual; that the neck of the femur was fractured close to the ball of the bone, the plane of the fracture being at a right angle to the long axis of the neck; that the outer fragment was considerably shortened, débris occupying the plane of the fracture; that there were no bands uniting the fractured surfaces to one another, and that there was no effusion into the joint, and no signs of the inflammatory process. The round ligament was perfectly entire, showing that the ball of the bone had never left the cavity of the acetabulum.

I believe that the integrity and tension of the ilio-femoral ligament was the cause of the adduction, flexion, and inversion of the limb, and that by its causing the centre of motion to be situated at its attachments to the anterior inter-trochanteric line of the femur was the explanation of the facility with which the outer fragment was returned into its proper position by the manipulation of the limb.

Of the one hundred and thirty cases of intra-capsular fracture of the neck of the thigh-bone which have come under my notice, and where the accuracy of diagnosis was verified by dissection, this is the only case I know of with flexion, adduction, and rotation inwards of the limb. Of the remaining number, in one case only have I met with rotation inwards, the limb in other respects occupying the usual straight position. I watched that case of intra-capsular fracture with inversion during life, and had an opportunity of verifying the diagnosis after death, and have been for many years in the habit of exhibiting the preparation to the students of surgery in the University of Aberdeen.

ON THE DANGER ATTENDING THE USE OF THE STOMACH-PUMP.

BY SIR JAMES ALDERSON, M.D., F.R.S.,
PHYSICIAN EXTRAORDINARY TO THE QUEEN.

In tenui labor.—VIRG.
Though low the subject, it deserves our pains.—DRYDEN.

So great is the outcry by the public in cases of poisoning for the use of the stomach-pump that I shall be excused in pointing out the dangers of its employment, more especially in unskilful hands. The annexed drawing is from an illustrated work on "Poisons," by the late Dr. Roupell and Mr. McWhinnie, showing the damage to the internal coat of the stomach by the exhausting power of the pump in a case of poisoning by arsenic. The case occurred soon after the introduction of the instrument into use.

In all cases of soluble poison the full effect of the stomach-

pump may be obtained by the use of a tube, used so as to act as a syphon, without any chance of danger to the patient. In a work of great merit, complicated with mathematical detail, by the late Dr. Arnott, published in 1829, the use of

a tube, without any pump attached, is suggested to act as a syphon in cases of poisoning, and as it can be used at all times without danger to the patient, I venture to call attention to it.

An india-rubber tube, with an opening near that extremity of the tube which is to be introduced into the stomach (being carefully passed down the œsophagus), is to be filled with water or some other bland fluid, the other end of the tube (which may be funnel-shaped) being held for the time *above the mouth*. As soon as the tube is full, pressure is to be quickly applied to the tube at its upper or outward opening; it is to be pinched quickly between the finger and thumb, and then turned downwards, when, acting as a syphon, it will empty the stomach. This process can be repeated as long as any indications are given that all the poison has not been withdrawn from the stomach. Of course, this only applies to soluble poisons, and in these cases only can such means be judiciously employed.

The power of the syphon is not great, but it is sufficient for the occasion, and is without danger. The power is measured by the difference only in the weight of the fluid in the two legs of the tube measured from the surface of the fluid in the stomach; the only requirement for its proper action being, that the outer orifice of the tube, during its use, should be held well below the surface of the fluid in the stomach. The syphon (or, more properly, siphon) is of old origin, supposed even before the Christian era. Its name—σίφων, a canal, or tube—in no way indicates its use. Various of our intermittent springs, in this country, are dependent on its action. In these cases the tube is naturally formed: it communicates with a naturally-formed chamber in the rock, which receives water from a constant spring, and as soon as the water in the chamber rises above the level of the bend in the syphon the chamber is emptied, to be again filled, and from time to time emptied. There is one of these intermittent springs on Giggleswick Scar in Yorkshire; and I have no doubt the "fluttering of the water" in the pool of Bethesda, described in the Gospel of St. John as the work of an angel, was of this character. In passing through the chamber, or before, the water might have gained, in solution, some salt favourable to the alleviation of certain cases of rheumatism, which would only be available on its exit from the tubes, before admixture with, or diffusion in, the body of the water in the pool.

Again, the stomach-pump is used for feeding insane patients. Now there is really no occasion for such an apparatus. A tube will answer all the purpose, provided care be taken to keep the outer opening of the tube well above the mouth of the patient. Gravity will exercise all the power required for the passage of liquid food into the stomach; and those dreadful fears, always expressed by the patient when the pump is used, will be altogether avoided.

Berkeley-square.

ON

HYDRARTHROSIS AND ARTHRITIS OF THE KNEE, CONSECUTIVE TO LYMPHANGITIS OF THE LOWER LIMB.

BY PROFESSOR VERNEUIL,

SURGEON TO THE PITIÉ HOSPITAL AND PROFESSOR OF CLINICAL SURGERY OF THE FACULTY.

IT is my desire to draw attention to a variety of affections of the joints which I do not believe has yet been described, but which cannot be very rare, as in my single practice I have met with it five times. I mean the propagation, to the synovial membrane of the knee-joint, of a superficial inflammation, originating in the subcutaneous lymphatic *réseau*, and assuming the form of lymphangitis of the large vessels, or that of erysipelas. Owing to the precision and the distinct character of its etiology, and the gravity of its prognosis, I consider that this variety merits special mention.

Firstly, I will give a brief summary of my five cases.

Some twenty years ago I was called by one of my colleagues to see a patient living in the neighbourhood of Paris. He was a merchant, fifty years of age, much broken down by excesses of all sorts, and had been obliged to remain in bed for a fortnight on account of lymphangitis of the leg. The mischief had begun by a small excoriation of one of the toes which had become irritated by walking. The inflammatory accidents had developed suddenly, the limb was covered with red streaks, and a certain number of small superficial abscesses had formed around the inflamed lymphatic vessels. When I saw the patient several of these abscesses had already been opened, but there remained many more ready for incising, and others in course of formation. Two of these collections were of the size of a large olive, and were situated on the internal aspect of the knee. I incised them obliquely, and let out a considerable quantity of phlegmonous pus. I adopted the same treatment with the other collections, which were situated on the leg and thigh. On subsequent days other incisions became necessary; nevertheless, matters seemed to be progressing as favourably as the debilitated condition of the patient would permit, when suddenly the knee became the seat of violent pain and considerable tumefaction. These new symptoms had begun on the inside of the knee, round the spot where I had opened the two abscesses a week previously. Purulent arthritis set in with great rapidity, in spite of every means we could adopt. Different operations, including amputation, were proposed to the patient, but all were declined. The general condition became worse and worse, and the unfortunate patient died three weeks after the articulation had suppurated.

The second case came to my knowledge a few years later, and was that of a girl fourteen years of age. The patient was a slim, delicate, and nervous child. The nail of her big toe had fallen off after a contusion it had sustained, and a small collection formed underneath, which opened spontaneously. Shortly afterwards diffuse lymphangitis covered the whole limb. The swelling soon subsided, but several circumscribed collections were formed successively. The doctor attending the case incised these little abscesses, amongst which was one situated on the inside of the knee. On the next day the patient complained of pain in her knee, which was swollen. I was called in, and believed at the

time that the articulation had been opened. Purulent arthritis followed its course in spite of all we could do. The pus diffused into the thigh, the leg, and the popliteal space, the ganglions of the groin began to suppurate, and a purulent collection formed in the internal iliac fossa. I proposed amputation of the thigh, but the family refused all active intervention, and the child died after three months' incessant suffering.

A man, forty-eight years of age, very thin, and of a cachectic appearance, came under the care of my friend, M. Oulmont, at the Hôpital Lariboisière, for an acute malady presenting all the symptoms of typhoid fever. During the course of the disease a gangrenous patch formed on the dorsal aspect of the right foot, and when this fell one could see the tendons and ligaments of that region as well as some of the metatarsal bones. It was in that condition the patient was passed into my wards. I tried to improve the general health, and at the same time cleansed the wound, which had rather an ugly appearance. The patient was making slow progress when suddenly he had a rigor accompanied with vomiting and a high temperature. Shortly after traces of lymphangitis were to be seen starting from the wound on the foot. The red streaks were distinctly visible on the anterior and internal aspects of the leg, inside of the knee, and all along the course of the femoral vessels in the thigh. Rest, emollients, and mercurial frictions were ordered along the inflamed parts, and soon afterwards all the mischief disappeared except near the knee, where some lymphatic vessels became more and more swollen, and finally gave rise to a badly circumscribed phlegmon occupying the whole internal aspect of the joint. The articulation remained healthy for a while, but two days after, just as I was about to incise the phlegmon, the inflammation was communicated to the synovial membrane. I thought at first that it was only a simple hydrarthrosis owing to the neighbouring inflammation, but when I had incised the abscess I found that the contents of the articulation, also composed of purulent matter, poured through the cutaneous incision. This complication supervening in a man already worn out, and who was passing a quantity of albumen in his urine, rendered the case hopeless. With much regret I proposed amputation, but this was refused, and the patient died at the end of eighteen days. The post-mortem examination showed a strongly injected synovial membrane, destroyed cartilages, and the spongy tissue of the bones exposed. The ligaments were softened and ruptured.

I met with the fourth case in 1869, whilst I was at Lariboisière Hospital. A man, thirty years of age, who had always enjoyed good health, though of a rather sickly appearance, came under my care in the month of December for an extensive swelling of the foot and leg of some days' standing. The symptoms were those of phlegmonous erysipelas, and began round an ulceration which had been caused by a badly-fitting boot. The temperature was very high, the abdomen distended, the tongue dry, there was intense thirst—in fact, the general condition was very unsatisfactory. Rest, elevation of the limb, mercurial frictions, purging, and sulphate of quinine, ameliorated this state, and all that remained was a phlegmon of the big toe, which opened spontaneously near the interphalangeal articulation. At the end of a few days the patient was able to walk about the ward. This improvement did not last long. Without any known cause the general symptoms suddenly returned, and the limb became again swollen, but this time as high up as the groin. The knee became extremely painful, considerably aggravated by the slightest touch or movement. It was easy to see that arthritis had set in, complicating the erysipelatous swelling. An appropriate treatment caused the swelling of the limb again to disappear, but the knee still remained enlarged and fluctuating, being manifestly affected with hydrarthrosis. Blisters were applied round the joint, and the fluid diminished a little in quantity; but the general condition of the patient remained unaltered, the temperature continued high, and soon an eschar formed over the sacrum, while an attack of pneumonia of septic nature came on and caused a fatal termination of the case in the latter part of February. At the post-mortem examination a large quantity of serous fluid, slightly clouded with pus, was found in the articulation.

My last case occurred at the beginning of the year 1878. A tall, thin, sickly-looking man, about sixty years of age, came under my care for subacute hydrarthrosis of the right knee of two or three days' standing, which gave him a little pain and caused him to limp. On examining the limb, I saw on the dorsal aspect of one of the toes a slight wound covered with a crust, and also an œdematous swelling of the leg, with two or three red fluctuating spots; on the inside of the knee were two lymphatic abscesses, typical in nature. My diagnosis was hydrarthrosis following on lymphangitis. This last-named affection had disappeared, and only left the circumscribed abscesses; but, on questioning the patient, we found that about ten days previously his leg had suddenly become swollen, painful, and streaked with red lines. These symptoms had been accompanied by malaise, fever, and rigors. I placed the limb in an apparatus, opened the three little abscesses of the leg, and contented myself with painting the two situated inside the knee with tincture of iodine. In a week these two collections disappeared, as did also the hydrarthrosis, and the following week the patient left for the convalescent home at Vincennes.

The five cases I have related present the greatest analogy one with the other. A small wound on the foot is the commencement; then, in four instances, lymphangitis of the large vessels takes place, with formation of circumscribed abscesses; and in the fifth case we have a kind of phlegmonous erysipelas very much resembling diffuse lymphangitis. With the exception of the little girl, who was rather sickly, the patients were all anæmic, weak, and of a poor appearance, consequently would be favourable subjects for diffused inflammations. In each case where we were called upon to watch the invasion of arthritis, we remarked that the symptoms came on very suddenly, and with great intensity. In three cases the arthritis was purulent from the beginning; in the two others the fluid remained serous or sero-purulent. In four cases arthritis was preceded by lymphangitis and the formation of circumscribed abscesses. In the fifth case the articulation seemed to become affected at the same time as the leg became tumefied.

Several conjectures may be made upon the mode of transmission of the inflammation. One may suppose, for instance, that the lymphatic vessels coming from the synovial membrane and opening into the larger vessels become inflamed from their termination down to their point of origin in the synovial membrane. This mode of propagation is met with in superficial lymphangitis of the limbs. It may also be conjectured that, as the subcutaneous lymphatics are only separated from those contained in the synovial membrane by a thin layer of fibrous tissue, the inflammation forced that barrier. There is no reason to doubt the possibility of the opening of one of the lymphatic abscesses into the articulation. The purulent arthritis continues its course, which is more rapid if the patient is in a debilitated condition. It is thus that the death of the first three patients is accounted for, having refused all operative interference which might possibly have saved their lives. Hydrarthrosis naturally offers much less cause of apprehension, and in our last case we saw it disappear very rapidly. The diagnosis is generally easy, for it will always be possible to recognise the lymphangitis or the initial abscesses.

I have little to say about the treatment. The only lesson to be gained from these cases as to the treatment is that lymphangitis situated on the inside of the knee should arrest special attention. Early incisions are also, I believe, an advantage.

As yet all my cases have had reference to the knee-joint, but I am quite ready to admit that other articulations may become the seat of similar affections.

Paris.

A CASE OF URTICARIA HÆMORRHAGICA.

BY DYCE DUCKWORTH, M.D., F.R.C.P.,

ASSISTANT-PHYSICIAN TO ST. BARTHOLOMEW'S HOSPITAL; EXAMINER IN PRACTICE OF PHYSIC IN THE UNIVERSITY OF EDINBURGH.

IN THE LANCET of Oct. 7th, 1876, I described a case of one of the rarer forms of urticaria—viz., U. bullosa,—and I now have to record some brief notes of an equally uncommon variety which has been termed "hæmorrhagic urticaria." The affection was strictly limited to the helices of the ears in the following instance.

The patient was a woman, E. A——, aged twenty-seven, married, without family. On the 14th of August last she came for advice to the hospital, and was seen by my colleague Mr. Marsh, who passed her on to me. The history was that six weeks previously her ears (the helices) had

become sore and itchy. At the same time patches of raised, stinging eruption had appeared on both arms.

So far as could be ascertained, there was no overt cause for these outbreaks, and no dietetic indiscretions were acknowledged. The eruption on the arms had passed away, and caused no further annoyance, but the ears continued troublesome. The patient could give no account of the appearance presented at this time. She had procured some ointment from a druggist, which, on application to the ears, had apparently done more harm than good.

On examination there were seen to be several dark-purplish patches on the helix of each ear. These were hard, puckered and dry in places, and presented at first sight much the appearance of portions of dry gangrene about to become detached. In the less dry patches there was evidently effused blood. There were no signs of purpuric affection in any other part of the body. The tongue was flabby and slightly furred. There had been no previous attacks of urticaria, or of any similar affection. The heart was found to be natural, and there was no history of rheumatism. Unguentum zinci was ordered locally, and some carbonate of soda in bitter infusion given internally. In a week there was most marked improvement in both ears, and the patient did not return.

Several of my colleagues saw the case, and agreed in the diagnosis of urticaria occurring in a hæmorrhagic form on the ears. The long duration of the case was no doubt due to the extravasations, and it is not unlikely that some irritating ointment had added to the original trouble.

It seemed right to exclude both the affection described as purpura urticans, and any variety of multiform erythema in which hæmorrhage sometimes occurs.

Grafton-street, Piccadilly, W.

CASE OF PUERPERAL CONVULSIONS.

BY H. B. VINCENT, M.R.C.S. &c.

ON August 26th, 1877, I was summoned about 4 A.M. to see A. C——, aged nineteen, a fine, well-made, healthy woman, unmarried, but eight months advanced in first pregnancy. Had always enjoyed good health; family history good; onset of present illness sudden. When I first saw her, the puerperal convulsions were well marked, being very severe, and occurring frequently. The insensibility to external impressions of all kinds was very profound. She was passing water very freely, and her bowels were much relaxed. On making a vaginal examination, I found the head presenting. The os would barely admit the tip of the finger, and there was not the least sign that labour was likely to set in. I applied sinapisms to the calves of the legs, and prevented the patient from damaging her tongue, and waited. As the convulsions increased in severity, and the insensibility was becoming very profound, I bled her to fourteen ounces from the arm, but this seemed to have no material influence. At the end of six hours from first seeing her, finding that the patient's condition did not improve, and that there were no signs of labour coming on, I drew off a small quantity of urine, which was highly albuminous and very dark, then introduced the smallest of Barnes's bags, and slowly dilated the os with warm water. After introducing the largest bag, and dilating it as far as possible, I removed it, and found the membranes protruding. I waited a short time to see if the pains would come on to dilate the os a little further before rupturing the membranes; but as no pains came, I ruptured the membranes, discharging a small quantity of discoloured and very offensive liquor amnii. I then applied the long forceps, and with great difficulty delivered, with only a slight rupture of the perineum, not sufficient to require a stitch. The child had been dead some time; the head had undergone considerable compression from the forceps. The placenta was adherent, and I had to introduce my hand to remove it. During the whole of the proceedings the convulsions continued, the insensibility remaining profound. The time taken, from the introduction of the first bag to the delivery, was nearly an hour. When seen in the evening she was still unconscious; very quiet; breathing freely; pupils contracted; fair amount of discharge. Catheter used; about one pint of urine, one-eighth albumen. Temperature 102°; pulse 120. Had three slight convulsions since the morning; takes beef-tea and milk; tongue very much lacerated by the teeth; vagina to be frequently syringed out.

Aug. 27th.—Slept well; slightly conscious; unable to speak; no return of convulsions; has taken nourishment well; bowels not open. Catheter used; urine acid, specific gravity 1015, about one-eighth albumen. Temperature 99°; pulse 120; respiration 24. Lochia fair in quantity, inoffensive.

28th.—Has had a profound sleep; consciousness quite restored; can speak fairly well; appetite good. Catheter used; urine slightly albuminous; breasts painful. Extract of belladonna ordered. Temperature 99°; pulse 108; respiration 30.

From this date the patient progressed well. The albumen gradually disappeared from the urine; the breasts gave no trouble; has had no more return of the convulsions, and her health has been excellent.

Remarks.—I have brought this case forward in order to hear the experience of members of the profession in cases of severe puerperal convulsions occurring before labour has fairly set in, and in which the convulsions are continuous and severe and the coma profound and unintermitting. Whether venesection, the administration of purgatives, antispasmodics, sedatives, and the inhalation of chloroform, have proved useful allies in their hands, or whether these temporising agents are not fraught with mischief, in this class of convulsions, where the exciting cause is peripheral and not central, the correct interpretation of the pathological conditions seeming to me to point rather to the speedy evacuation of the contents of the uterus (the mortality of the mothers being one in four), and as in the great majority of cases the fœtus is dead (about one in three), we have less compunction of conscience in using means to reduce the bulk of the child in order to facilitate its rapid removal. Therefore, supposing a case of severe convulsions to occur in which the os was closed, rigid, and undilatable, and in which, as far as human judgment could foretell, the profound coma would end fatally, would one, in the face of the accumulated experience of surgeons in dealing with the abdominal cavity under the antiseptic method, be justified in resorting to Cæsarean section in order to attain what I believe to be the goal of treatment—viz., rapid delivery?

East Dereham, Norfolk.

POISONING FROM AN OVERDOSE OF SWEET SPIRITS OF NITRE.

BY H. CRIPPS LAWRENCE, L.R.C.P. LOND.

ON March 29th, 1877, G. W——, aged eighteen years, came under my notice, and I was informed that for some days past his manner had been strange and confused. On the evening of my visit his friends became alarmed, as he wandered in his mind, threatening to cut his throat. His mother had ascertained that for three weeks past he had been taking an ounce of sweet spirits of nitre in water at intervals during almost every day.

I found the patient on my arrival delirious and incoherent in his manner, drowsy, as if he had been taking alcohol, which was not the case. When he was roused he could answer questions, complained of headache, and said he had found it difficult to walk straight of late. He could see clearly, the irides being somewhat dilated, acting feebly. Skin and tongue were dry, breath smelling strongly of ether. Pulse 60, small and hard. Constipation well marked. No vomiting. Urine had not passed since early morning, and had been scanty of late. Bladder empty on pressure above pubes. Diaphoretics (solution of acetate of ammonia), warm bath, aperients, and a linseed and mustard poultice over the renal region were ordered.

March 30th.—Had a good night. Skin was beginning to perspire. Constipation and suppression of urine unrelieved, although he had had two doses of aperient medicine. Calomel and jalap were now prescribed in pills, and a linseed-meal poultice to be continuously applied over the kidneys. At 6 P.M. evidently better. Bowels had acted twice, and one ounce of urine voided with the first motion, and more with the second. Pulse 80, softer. Not so drowsy; less headache. A little urine was passed for examination,

and found to be only slightly albuminous. Dry cupping over the kidneys. From this time convalescence progressed rapidly.

Remarks.—This case, and the very interesting one published in THE LANCET of Nov. 30th, 1878, by Mr. T. Wood Hill, point out—1. The danger of an indiscriminate use of a "common domestic remedy." 2. Excessive ingestion of the spirit of nitrous ether, produced in the infant a rapid congestion of the kidney and albuminuria, besides the more prominent features mentioned by Mr. T. Wood Hill in his autopsy. In the adult, however, an excessive ingestion of the same spirit, even for three weeks, also only induced a slight albuminuria. The explanation of this apparent anomaly is to be found, no doubt, in the fact that for a while the skin acted freely, and the intestines also; but when cold checked the skin action, coexistently with the occurrence of constipation, the stress of elimination fell upon the kidneys, whose function being speedily interfered with, became incompetent to eliminate the poison with sufficient rapidity from the system, and then, happily for the patient, delirium ensued, attracting the attention of his friends to his state. 3. Both cases forcibly indicate how cautious chemists should be not to supply this popular drug (spirit of nitrous ether) either in large quantities at a time, or in small quantities frequently to the same purchaser.

STRANGULATED HERNIA IN PRIVATE PRACTICE.

BY C. F. MAUNDER,
SURGEON TO THE LONDON HOSPITAL.

MORE than twenty years ago I performed my first herniotomy under very inconvenient circumstances. While administering chloroform I had to operate; my medical friend held the candle, and a female relative of the patient (with eyes averted) held the mouthpiece in position. Often, in the course of a personal experience of about 130 operations, varying inconvenience has been felt. A few years ago I suggested the use of an enlarged wire eye-speculum to separate the edges of the wound, as a substitute for skilled fingers. My most recent trial of its value occurred last week, on the night of Dec. 20th. I was hurried out of town by the last train, and advised immediate herniotomy in the person of a female, aged seventy-two. It became the duty of my medical friend to give his sole attention to the chloroform, while my only other assistant (the patient's son) held the light—three candles tied in a row. The hernia (femoral) was turned well up over Poupart's ligament, while fibrous bands tightly constricted its neck, and were deeply placed. The speculum allowed the light to reach the bottom of the wound, and thus added greatly to the safe performance of a delicate operation. Frequently even a lay assistant is not forthcoming.

Queen Anne-street, W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. IV. Proœmium.

GUY'S HOSPITAL.

DISEASE OF THE TIBIA OF TWENTY-SEVEN YEARS' STANDING, INVOLVING KNEE-JOINT; PROGRESSIVE PHTHISIS; AMPUTATION AT THE KNEE BY GRITTI'S METHOD; RECOVERY, WITH THE SUBSIDENCE OF ALL CHEST SYMPTOMS.

(Under the care of Mr. BRYANT.)

HOW far local suppurative disease has the power of engendering pneumonic phthisis is a question of interest to all, though to the surgeon it has a practical bearing of grave importance. If it can be shown that the two classes of cases are related as cause and effect, the duty of removing local suppurative disease as soon as possible cannot be disputed. The cases the first of which we now publish, in which operative interference for bone and joint disease, complicated with chest trouble, was followed by the disappearance of all chest symptoms, support this view; and we hear from Mr. Bryant that his general experience tends to show "that organic lung trouble is prone to follow prolonged suppurative local disease, particularly of bone; and that, when the lung disease is not far advanced, the best treatment of the patient is to take away the local suppurative disease by a *complete* operation—this measure, as a rule, being followed by the disappearance of the chest symptoms." We would invite the attention of surgeons to this question as one pressing for a solution. In conjunction with the subjoined, we would refer to a case published in the "Mirror" (February 23rd, 1878, page 273), in which Mr. Savory amputated the lower third of the forearm of a phthisical person with benefit to the lung. We are indebted to Mr. H. Davey for the accompanying notes.

R. H. S——, a labourer, aged forty-two, was admitted into Job ward on Jan. 7th, 1875. His history was good. His father and mother died over seventy. Of ten children, two died in infancy and three since, one of them after parturition. The patient had never had any illness or trouble except with his leg. Had an attack of ague twelve years ago. At the age of fifteen—that is, twenty-seven years before admission—his father kicked him a few inches below the knee for loitering about. He did not feel any trouble for several months, and went about his work as usual. Then a large abscess began to rise over the seat of injury, and increased to a very large size; but he did nothing for it, still going about his work. One day he felt something burst, and on looking down found a large quantity of discharge from the abscess. A medical man then ordered him to be put to bed, and twelve leeches were applied, with poultices afterwards. He remained in bed for six months, during which time the leg was washed with warm water and a lotion applied. He then got up, and for six weeks walked about on a crutch. During this time the part was lanced every week, healed up and was lanced again. He then left off his crutch, and after a long time, having recovered his strength, went to work again, and felt no more of it until nine years ago. Ever since that time there had been a small hole over the surface of the injury and a slight running.

Eighteen years subsequently he noticed that the leg round the knee was swollen and painful, and he was ordered rest and cold-water bandages. Pieces of bone from time to time worked out, in all about thirty pieces, some being taken out by himself as long as his finger, and others by his medical attendant.

When admitted on the 7th he looked weak. There was extensive necrosis in the left leg, extending from about an inch from the head of the tibia. There was one large hole about the middle, and numerous discharging sinuses of varying size mostly at the upper part of the leg. All the bone had been withdrawn from the large hole. The knee-joint was likewise involved, though not suppurating. A sinus on the inner side extended about three inches downwards and backwards. Another on the outer side extended upwards about two inches. The leg was dressed with water-dressing, and fifteen drops of tincture of perchloride of iron and one grain of quinine were given three times a day.

On the 14th he spat blood. Dr. Taylor examined his chest, and found that there was dulness at right apex extending in front down to second rib, behind nearly to spine of scapula; slightly marked bronchial breathing, and fine moist râle, larger and moister anteriorly; viscid sputa of partly coagulated rusty mucus, and occasional streaks of blood; rigors occasionally; sweating at night. Lung elsewhere fairly sound. Dr. Taylor took these symptoms as evidence to indicate phthisis, perhaps slowly progressing. A five-grain conium pill was given at night.

On the 17th and 18th the temperature was 98·4°; on the 24th he had considerable epistaxis.

Feb. 2nd.—Accepting Dr. F. Taylor's report of there being evidence of slowly progressing phthisis in this case, and in view of the fact that there had been progressive disease of the tibia for twenty-seven years, with extension

of disease to the knee-joint and destruction of the soft parts covering the bone, Mr. Bryant determined to amputate the limb, as he felt the local disease was as much beyond a natural cure as it was beyond a cure by any partial operation, and he, moreover, believed that the chest symptoms were probably due to the long pre-existing suppurative disease in the leg. Accordingly, on Feb. 2nd, the patient was put under the influence of chloroform, and Esmarch's elastic bandage was applied above the knee. The unhealthy surface was carefully wiped downwards towards the foot, to remove discharge from the neighbourhood of incisions. Mr. Bryant amputated through the knee with anterior and posterior flaps, but, the available skin not being sufficient to make a good stump, the condyles were sawn off, the posterior surface of patella removed, and the remaining fragment adapted to the sawn end of femur after Gritti's fashion. The vessels were ligatured with carbolised catgut, as when torsion was applied they broke away. The surface of the wound was washed, as is Mr. Bryant's custom, with iodine-water, and the stump fixed upon a splint, with dry lint as dressing. Almost the whole shaft of tibia was necrosed and enclosed in nearly perfect casing of new bone, which was riddled with numerous cloacæ.

Although the corners of the stump sloughed, and eventually the greater part of the posterior flap, the patient did well. Only once the temperature reached 100°, it ranging usually between 98·2° and 99·2°.

On Feb. 17th, Dr. Taylor reported the patient "free from cough, sputum, and pain; distinct bronchial breathing and bronchophony above and below right clavicle; from first rib to third space small moist râles; posteriorly signs less marked than on previous examination. Phthisis of right lung more extensive than formerly, but is not very active now."

He continued to improve, and on the 23rd the stump was granulating satisfactorily. On the 26th there was hæmorrhage from the stump; almost half a pint of blood lost; controlled by pressure.

On March 2nd, about 7.30 A.M., there was bleeding from stump; he lost about a teacupful of blood; the hæmorrhage was arrested with cold water. There was no more bleeding after this. On the 12th the splint was taken off. He was slowly improving, and on the 16th he said he had been spitting blood the last two or three days.

On the 23rd he was up in a chair for the first time, but four days later he was in bed again because the stump pained him and throbbed a little. He was able to get up again in a chair on the 30th, when the patella appeared to have united to the end of the femur firmly, and also some new bone to have been thrown out, for there was a good solid end to the stump.

As he complained occasionally of pain in the stump, a poultice was applied on the 13th, which produced a slight discharge, after which he felt easy. On the 22nd he went out to go to Bognor.

He returned from Bognor on June 10th, well in all respects. He had a good solid stump, upon which he could bear the weight of his body. There were no chest symptoms of any kind.

[We shall publish the second case next week.]

WESTMINSTER HOSPITAL.

PYREXIA WITH HYPERÆSTHESIA; RAPID AND EXTREME MUSCULAR WASTING; MOTOR PARALYSIS OF ARMS; PARTIAL RECOVERY; REMARKS.

(Under the care of Dr. STURGES.)

THOMAS L——, aged fourteen, railway clerk, a somewhat spare and delicate lad, was admitted on October 3rd, 1878. Six days before he had shivered, and felt headache, but did not keep his bed. Two days before, while lifting a heavy weight, a sudden pain occurred in the left hip, and he afterwards took to his bed.

On admission he had an aspect of weariness and depression suggestive of enteric fever; pulse 114; respiration from 30 to 36; the tongue red and furred; bowels rather confined, the motions natural; urine acid, of high specific gravity, containing no albumen or sugar. On attempting to raise him for auscultation, it was noticed that he resented movement, and even touch. Pain was referred more especially to the left hip, which did not, however, on careful examination, appear different from the other.

During the first week the temperature oscillated very irregularly between 101° and 104° (its highest point at any time); the pulse increased in frequency, and on the ninth day of illness was 150; the respiration varying widely, and ranging between 40 and 50. The boy was delirious at night, and still fearful of movement. Some doubtful spots appeared over the chest and abdomen; but, from the quite natural character of the motions, the alertness of intelligence and sensation, and the symptoms to be immediately detailed, the notion of typhoid fever was early dismissed. It was noticed from the first that, with great frequency of respiration, the inspiratory movement was almost solely of elevation, and that the abdominal muscles were abnormally still. There was no sense of dyspnœa, and no appearances in the face of imperfect blood aeration.

On the fourth day (the dates henceforth are from the day of admission) a quite novel symptom made its appearance. It had been noticed from the first that the boy wasted very rapidly, but now it was observed, in addition, that he had almost complete palsy of motion of the arms. These limbs lay by his side useless; they offered no resistance to flexion, but great pain was given by such movement, both at the shoulder and elbow joints, which were, however, free from redness, swelling, or special tenderness. The legs, although wasted (like the rest of the body below the neck), did not share at all in the palsy of the arms. The muscles of the neck, however, were painful on movement, so that the head was fixed, not from any paralysis, but from fear of moving it. The arm paralysis was incomplete in this respect, that, when urged to do so, the patient could accomplish some slight movement of the fingers, and, with these as levers or hooks, would cause the arms to travel a little. There was no difficulty in swallowing; no retraction of the head, or muscular spasm of any kind, and no want of tactile sensibility. The boy had a fair appetite, and, after the night delirium and the headache of the first few days, no "head symptoms."

On the fourteenth day (the condition in the interval undergoing little change save rapidly progressive wasting) a raised pink eruption of small vesicles, arranged in well-defined groups, appeared over the chest and belly. It had the character of ordinary herpes, but was not painful or irritating. The pyrexia had now somewhat abated (night temperature 102·5°; pulse 130), and on its sudden cessation on the twenty-eighth day the skin eruption did not disappear but lost its colour, the boy's face and surface becoming at the same time remarkably exsanguine. Soon the skin of the body, legs, and arms became rough, dry, and harsh. With the temperature the pulse and respiration fell, but to a less degree, the pulse remaining 115 or thereabout, and the respiration from 30 to 36, with the same kind of chest movement as before.

The condition now was essentially a chronic one, and pretty much as it remains to this day: extreme emaciation from the shoulders downwards, with motor power slowly returning to the arms; the glutei muscles had wasted so much as to discover to the eye the shape of the pelvis and thigh bones, and the points of the shoulders stuck out. The boy's length being 4 feet 9 inches, his upper arm and forearm at their thickest part measured respectively 5½ inches and 5¾ inches; the greatest measurement round the thigh was 10 inches, round the leg 8 inches. No material difference existed between the sides. His weight was 4 stone. There was now slight resistance to flexion of the right elbow, with pain on moving it. The bowels were very inactive, so that the hardened rectal contents had to be mechanically removed. The digestive functions were well performed, body temperature but little raised, and the condition one of fair comfort, the face so far retaining its plumpness as to be a very unfair index of the general nutrition. He still lay constantly on his back, and made no voluntary attempts at movement of the arms on account of pain. The habitual position of these limbs was one of lax extension by the side of the body; they could still be moved, however, by the aid of the fingers, while some slight power of movement was beginning to reappear in the elbow and shoulder joints. The continuous current was assiduously applied to several muscles up to twenty cells, a strength which gave him acute pain, but with no response whatever. Faradaism was also tried with the like result. Throughout there was no want of power or motility in the legs; no affection of the bladder; no tremor or rigid spasm; no ataxy; no stages of progress

in the wasting, but an invasion of the whole body at once.

Remarks by Dr. STURGES.—The foregoing is an abstract, mainly from the notes of Mr. Bailey and Mr. Stace, clinical clerks, of a lengthy case. Although many particulars are necessarily omitted, it is believed that none of them refer to essential points. The subject of the disease is a healthy boy with no specific history and of good family. The disease itself commenced, as it were spontaneously, with sudden pyrexia, which lasted four weeks, with a general resemblance to typhoid fever. It was early distinguished by sensitiveness to touch, mental alertness, and stiffness and pain of the muscles at the nape of the neck. A week from the initial rigor began the rapid and simultaneous wasting of the limbs and trunk, with almost complete paralysis of the arms and a widely-spread vesicular eruption. On the cessation of fever, power of movement of the arms began to return, but the wasting went on to extreme emaciation. As the hyperæsthesia departed the skin of the whole body became rough and coarse, and shed its epidermis abundantly.

Such are the leading features of the case. At the time of writing (eighty-two days from the beginning of the illness, seventy-two from the commencement of paralysis, and the 20th December) the emaciation of the trunk is extreme, but the face and neck have so far escaped that, when covered with clothes in bed, the boy's aspect is that of health and comfort. He is now able to turn in bed, although with difficulty, and does not use the arms for help. The movement of these limbs, however, is in great measure restored, and their little use is partly due to the pain in the large joints which movement gives. The digestive functions are well performed, and the chief trouble is from inactive bowels. The ultimate prognosis remains doubtful. There has been nothing in the treatment that calls for notice in this place, nor do I propose to prejudice the facts by any observations, but the symptoms are at once so definite and unusual that the case seems to demand this short record. The boy is still in hospital, and open to any one's investigation.

At the moment of writing I am referred to a case reported by M. Debove in *Le Progrès Médical* of Nov. 9th, 1878, where, with fever ranging from 101·3° to 105·4°, the muscles wasted *en masse*, there were acute pains in the limbs, "loss of electro-contractility," but integrity of sensation and of the organic functions. Careful post-mortem examination showed the absence of all disease whatever of the nerves or cord. The muscular fibres had undergone atrophy similar to that observed in diseases of long wasting, and "contrasting markedly with the appearances in true progressive muscular atrophy."

ST. LEONARD'S HOSPITAL, SUDBURY, SUFFOLK.

CASES OF FRACTURE OF FEMUR.

FOR the following notes we are indebted to Dr. J. Sinclair Holden.

During the past twelve months five cases of fracture of the shaft of femur were admitted; all of these were treated with the long splint, combined with the mode of extension introduced by Mr. Buckston Browne, and described by him fully, with diagram, in THE LANCET of October 10th, 1874. This long splint, furnished with block, elastic ring, and adjusting screw, was found to have the following advantages:—It was easily applied; it kept its place without rotating, and so maintained the extension in a line with the axis of limb; the amount of traction could be gauged at once by a glance at the stretched elastic ring. In every respect it was found to be a great improvement on the ordinary forms of long splint, while the results were most satisfactory, as follows:—

1. Male, aged seventy; seat of fracture in middle third; no shortening.
2. Male, aged forty-one; seat of fracture in middle third, very oblique; no shortening.
3. Male, aged fifty; seat of fracture in junction of middle and lower third; half-inch shortening.
4. Male, aged nineteen; seat of fracture in lower third; half-inch shortening.
5. Male, aged seventeen; seat of fracture below great trochanter; half-inch shortening.

No anterior splints were used, but when there was any tendency to overriding, a small oblong shot-bag was placed on that part, which effectually subdued tilting, and gave no inconvenience to the patient. Plaster-of-Paris bandages were used in the after-treatment, combined in the last case with the tin slips used in Sayre's spinal jacket. These tin slips, without perceptibly adding to the weight, increased the firmness of the plaster bandage, and promise to be of great use in the putting up of recent fractures, particularly of arm or leg.

TEWKESBURY HOSPITAL.

STRICTURE OF URETHRA; RETENTION OF URINE RELIEVED BY HOLT'S OPERATION.

(Under the care of Dr. DEVEREUX.)

FOR the following notes we are indebted to Mr. E. C. Bousfield, M.R.C.S.:—

Benjamin M——, aged sixty-six, was admitted October 6th. He contracted gonorrhœa forty-three years before, and suffered from stricture at the time. After this he remained for a time free from trouble, but for the last ten years or so he had been subject to occasional difficulty in micturition. Three years ago an instrument was introduced, and he afterwards got on fairly well up to a fortnight before admission, at and during which time he became much worse, passing only a tablespoonful or less of water at a time, with much straining and at frequent intervals. On October 1st and 2nd several attempts were made by two surgeons to introduce a catheter, but no water was drawn off, and blood flowed on the withdrawal of the instrument. During the week previous to his admission he had been in the habit of introducing bents of grass into the urethra, and he says he has been able to relieve himself a little by this means. On admission he was suffering great pain, and was quite unable to pass water. Ordered half a grain of morphia suppository and six drachms of castor oil. Later in the day he was put under chloroform, and on attempting to introduce a catheter it was found that there were two long false passages on either side in front of a stricture situated in the bulbous portion of the urethra; but Holt's dilator was introduced with some difficulty, and the stricture expanded up to No. 8. One pint and a half of urine was drawn off, and No. 3 catheter was retained in the bladder. The suppository was repeated.

The patient slept well, and much urine drained off by the side of the catheter. Next day the bladder was distended, and twenty ounces of urine were drawn off. The patient remained comfortable during the rest of the day; but little urine passed by the side of the catheter, which appeared in the evening to be blocked up. It was therefore withdrawn, and another introduced, but it was necessary to give chloroform on account of the pain. No. 8 was got into the bladder, and a pint of water was taken away. The catheter was not left in.

He had a good night, passed urine with little straining, and next morning (8th) the temperature was 99°; at 10 P.M., pulse 68°, temperature 98·1°. From this time the patient continued to improve.

An attempt to pass No. 7 on the 12th caused so much pain and spasm that it was abandoned; but on the 13th chloroform was given, and a No. 8 introduced with little difficulty; and on the 17th the patient was discharged, being able to empty his bladder, though for the most part slowly, apparently on account of some enlargement of the prostate. General health very good.

SOUTH LONDON SCHOOL OF PHARMACY.—The sixth annual dinner took place at the Horns Assembly rooms on Friday, the 20th ult. There were about one hundred and thirty old and new students present, together with a number of gentlemen interested in the school. Dr. Julius Pollock presented the prizes to the following successful students:—Senior Chemistry: Medal, Mr. Pocock; Certificate, Miss Slammwitz. Junior Chemistry: Medal, Mr. Harrison; Certificate, Mr. Newbiggin. Botany: Medal, Mr. Lord; Certificate, Mr. Scammill. Materia Medica: Medal, Mr. Newbiggin; Certificate, Mr. Lord. Practical Pharmacy and Dispensing: Medal, Mr. Lemmon; Certificate, Mr. Lord. Silver Medal of the School Session 1877-8: Mr. John E. Phillips.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

Heart Disease in Children.

AT the meeting on December 16th, Mr. Erasmus Wilson in the chair, Dr. DAY read a paper on some Heart Affections in Children, dependent on valvular disease or connected with thoracic deformity. Valvular affections, left-sided, except in congenital cases, are especially frequent among girls, and may arise independently of rheumatism or febrile disorders. But there is less liability for valvular disease to increase in children, and a power of tolerance, and even of repair, which are not seen in later life. Heart disease due to thoracic deformity generally occurs in rickety subjects, dilatation and hypertrophy often being established from the increased difficulty in the circulation entailed by the change in shape of the thorax. The author urged early attention to such cases, and their careful treatment. He remarked that congenital heart disease often limited the development of the body generally, and crippled its power; whilst rheumatic heart disease also interfered with growth and mental capacity. At the same time too great significance should not be attached to a murmur heard over the mitral orifice in young and weakly subjects in the absence of rheumatic history and endocarditis, the abnormal blood-condition and weakening of the heart muscle from this being sufficient to account for the generation of such a murmur.—The PRESIDENT inquired whether valvular affections in rickety subjects differed from those produced by rheumatic endocarditis.—Dr. SANSOM said that a marked character of heart disease in children (which was more frequent than usually supposed) was the absence of symptoms. He had known extreme pericarditis and endocarditis in a child with hardly any departure from the normal state; the child had previously had some rheumatic phenomena. Valvular disease might be summed up as "rheumatic," "papillary," and "ulcerative," putting aside degenerative changes, which are not likely to occur in children. In the rheumatic form all the layers, and especially the fibrous layer, of the valve are affected; in the papillary the superficial layer only. The heart had great power of adapting itself to valvular changes, and he did not regard the prognosis of these cases so seriously as Dr. Day did. Rest was the treatment above all others.—Dr. FARQUHARSON said that rheumatism, often very slight and unnoticeable, was the great cause of heart disease in children; and he agreed with Dr. Sansom as to the occurrence of acute valvular lesions with comparatively slight symptoms. In childhood, growth and development prevent the compensatory changes that take place in adults, there being more dilatation and less hypertrophy. Iron and digitalis yield marvellous results.—Dr. SYMES THOMPSON also bore testimony to the value of these drugs combined with rest.—Dr. FOTHERGILL said that thoracic deformity as a cause of valvular disease had not been sufficiently studied. Rokitansky and Hilton Fagge had written on the subject. Strain is undoubtedly a cause of aortic disease, and probably of mitral disease also. It was unexplained why mitral disease is more common in girls than in boys. There was no doubt that mitral disease in many children seems to have a tendency to get worse. Many children, the victims of heart disease, passed through childhood and puberty exceedingly well, occasional rest in bed being most important; others break down at puberty. The belief that iodurretted frictions are of service in valvular disease had little foundation, and there is no evidence that iodide of potassium influences the progress of the lesion.—Dr. DE H. HALL mentioned diphtheria as another cause of valvular disease in childhood. Congenital heart disease was not necessarily attended by any marked symptoms, and he referred to a case in illustration of this. He also cited several cases of aortic regurgitation which had ended fatally without any previous symptoms.—Dr. DAY replied, and the meeting adjourned.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

AT the ordinary meeting of this Association on Dec. 18th, Mr. W. A. N. Cattlin, F.R.C.S., Vice-President, in the chair, the following gentlemen were elected Fellows:—Dr. Hazleton and Messrs. A. Stewart, T. Hawkins, G. W. Smith, and E. A. Morgan.

Mr. FRANCIS MASON exhibited a patient aged eight years on whom he had performed Esmarch's operation for Closure of the Jaws arising from a cicatrix, the result of cancrum oris. The boy could now separate the incisor teeth of the jaw on the right side to the extent of an inch and a half.

Dr. C. MEYMOTT TIDY then read a paper "On Anæsthetics." He esteemed it an honour to have been invited to address the Association on a subject which is at this moment receiving very considerable attention. The question of the use of anæsthetics was a broad and not a narrow one, and was a professional question in its widest and most comprehensive sense. He proposed to regard the subject of anæsthetics generally, and perhaps more from a medical jurist's point of view than any other. His object would be served if the few thoughts he had to offer proved introductory to the remarks of others whose experience in the use of anæsthetics was different from his own. After alluding to bichloride of methylene as an anæsthetic, which on a large scale had as yet not been proved, Dr. Tidy remarked that the three anæsthetics around which interest chiefly centred were chloroform, ether, and nitrous oxide. Each had its advantages and disadvantages. After fully discussing these points in detail, the question arose, Why do we give anæsthetics? In a few words, it was "to diminish nervous and mental tax." What does this phrase "nervous and mental tax" signify? 1. Anæsthetics relieve nervous and mental tax by allaying the apprehension and fear of an operation. The degree of apprehension differs with different temperaments, its evil effects differing accordingly. We cannot say that anæsthetics are justified only in proportion to the magnitude of an operation, but that they are equally justified in proportion to the dread the patient has of that operation. An anæsthetic, from this point of view, may be more needed by one who is going to have a tooth out than by one who is going to have his leg off. Further, by giving way to a patient's clamour for an anæsthetic we need not imagine that we are merely humouring a whim, but rather that we are considering an actual need. 2. Anæsthetics relieve mental and nervous tax by producing insensibility to pain. This, of course. "No one ever died of pain," is a common saying, and, like most common sayings, is absolutely untrue. People do die of pain, and to relieve that pain is the duty and privilege of our profession, for the twofold reason—(*a*) that of rendering life happy, and (*b*) of prolonging it. These are days of advanced civilisation, and the higher nervous sensibilities of the nineteenth century life render the administration of anæsthetics more necessary than they would have been amongst people less highly civilised than ourselves. Compare, for instance, as an example amongst the lower animals, the rough cart-horse with the high-bred racehorse; the former seems to heed not the emptying out of a cartload of bricks at its back, the latter is terrified by a clap of the hands. This much, then, in answer to the question—How did our forefathers manage without anæsthetics? Again, let us regard this subject from another point of view. It has often been made a charge against sanitarians that the death-rate is exactly the same to-day as it was twenty-six years ago, before medical officers of health were appointed. Our answer is, see how the population has increased, and with this no increase of the death-rate. And why? Simply because, with increased risk, we have used means, and used them effectively, to diminish the sanitary evils arising from a large population. So in surgery, the nineteenth century has brought with it increased risk in the matter of surgical operations, a state of high nervous tension being one of them. Anæsthetics are discovered, and we are able to record a grand surgical triumph—viz., a diminished mortality from operations, even including the deaths arising from the anæsthetics themselves. 3. Again, anæsthetics allow for more elaborate, prolonged, and, one may add, more careful, operations to be

performed than formerly; and, in this respect, patients have reaped great advantages from their introduction, the question of time ceasing to be an element as it once was. Time is an element undoubtedly, but care, precision, and completeness are far greater elements in the work of a great operation. 4. Once more, the after-action of the anæsthetic diminishes the need there was before anæsthetics were introduced for the administration of opiates after the operation. This is a true gain, for we know what opiates mean, and how the need begets the habit. Such, then, are the reasons why we give anæsthetics, and now let us consider what may be called the doctrine of risks. Risks are of three kinds—first, the daily risks of life over which we have but little, if any, control; secondly, the risks we encounter through mere recklessness; and, thirdly, the risks we run deliberately for the purpose of avoiding greater evils. This last especially concerns us. Note first that the giving the anæsthetic is a risk, for there is not only the risk of bad after-effects, but the risk of death during its administration. But it is a balance of risks. In the one scale we have the illness and possible fatal result of the anæsthetic; in the other scale we have the effects of the pain itself on the patient, and more particularly the nervous exhaustion and shock resulting from the operation if the anæsthetic be not administered. These risks are run deliberately, and the rules for guidance cannot be reduced into pen-and-ink maxims for common use. And why? it may be asked. "Many men, many bodies," we answer. States of health and mental peculiarities are just as numberless as grains of sand. The scales by which the balance is to be decided should be in the hands of men who know how to handle the scales—i.e., in the hands of duly qualified medical men, and in their hands only. With whom, then, rests the deliberation? Partly, no doubt, with the patient, and partly with his adviser in the first instance; but having consented to take the anæsthetic, he is then absolutely in the hands of his adviser. Hence the balance of risks should be intelligently considered by one capable of considering them intelligently; but, more than that, that the administration of the anæsthetic itself should be absolutely confined to a qualified practitioner. Hence it is perfectly unjustifiable for any unqualified practitioner, however qualified as a dentist, to administer an anæsthetic to any patient, no matter whether the anæsthetic administered be nitrous oxide or chloroform. We admit, therefore, a risk, and our last question is an important one, By what means can the risk attendant on the administration of anæsthetics be reduced to a minimum? (*a*) Choose in every case the safest anæsthetic, and first in our list stands nitrous oxide, then ether, and, lastly, chloroform. We should not be justified in saying that the latter should never be used in dental operations any more than we could say it is never to be used in any other operation, but its use should be confined to exceptional cases. (*b*) The anæsthetic should be administered at the patient's house. This applies more especially to ether and chloroform. (*c*) No anæsthetic should be administered except by a qualified medical man, and, if possible, by an expert. (*d*) The operator should have nothing to do with the administration of the anæsthetic, and the administrator of the anæsthetic should have nothing to do with the operator. (*e*) If possible, a third qualified medical practitioner should be present in the event of something going wrong. (*f*) Everything that could possibly be required in the event of an accident should be in readiness. There can be but little doubt that of all means artificial respiration, and preferably by Silvester's process, succeeds best in restoring a patient; and also galvanism, which has been somewhat pooh-poohed, has undoubtedly done good in such cases, and should never be left untried. But artificial respiration must never be abandoned during the time that galvanism is being tried. Dr. Tidy, in conclusion, remarked that, addressing as he was a Society of *true* dental surgeons—true, in contradistinction to dental surgeons falsely so called, he had abstained from drawing any absolute distinction between dental and any other surgical operations; for the rules that should guide us in one surgical operation should guide us in all others in this particular. He trembled to think how often anæsthetics were administered by non-qualified men, and we should lose no opportunity of protesting with all our power against so terrible an evil—this playing with red-hot coals, although the remedy was in the hands of the public. To him, as a medical jurist, it had even a deeper significance. Should it be allowed—this administration of deadly drugs by non-qualified men, and that without the presence of others, on simply moral grounds? He made no charge against those outside our profession. God forbid. That anæsthetics have been administered for improper purposes, the black list of cases which had come before him professionally during the past eight or nine years abundantly proved. This possible evil must be guarded in every way. The law may be made all-powerful, but as yet it was not. To make the administration of anæsthetics by non-qualified men illegal, and to render it essential that more than one person should be present, would, perhaps, be a guard on the purity of our women, and also prevent false accusations (so easy to make and so hard to meet) being made by designing persons against ourselves. "These, then, are the thoughts submitted for your consideration,—saving a patient pain, arresting the evil results incident to a serious operation, are noble objects; and the science which has effected this has been a great benefactor of humanity. We need not fear admitting that such magnificent results are associated with certain risks, and the public will think no worse of us, but all the better of us, for admitting what they know as well as we do, and for grappling boldly with the difficulty. Thus, and thus only, shall we inspire that confidence in our professional work which it so justly deserves."—A discussion ensued, in which Mr. W. A. N. Cattlin, Mr. Mason, Mr. Napier, Mr. Bailey, Mr. Edgelow, and Mr. H. Cartwright took part, and the discussion was adjourned until the next meeting (January 22nd).

Mr. MILLS (chloroformist to St. Bartholomew's Hospital) then showed his apparatus for the administration of chloroform for operations about the mouth, fully described in THE LANCET of December 14th, 1878, p. 839.

PROVINCIAL MEDICAL SOCIETIES.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—At the November meeting, the President, Dr. Burnie, in the chair, Dr. TIBBITS submitted for examination a patient, ten years old, suffering from what was known as Pseudo-hypertrophic Paralysis. The child was born of a phthisical mother, was convulsed during dentition, and did not walk till two years and a half old, struggling on till his fifth year, when a straddling, waddling gait was observed. On examination his arms were wasted, grip weak, buttocks prominent, left more than right. Lumbo-sacral curve much increased, stands with legs apart, left turns in with slight equinus. When on back cannot get up without assistance; tries to get up on all fours. Calves thicker than normal, and right more than left. Sensation normal; reflex excitability diminished; no fibrillar contractions. Electro-contractility diminished. Muscles of ball of thumb do not respond to electricity. Axillary temperature 98·4° F.; under tongue 96°. No albumen or phosphates in the urine. Dr. Tibbits said he regarded these effects as a variety of progressive muscular atrophy, the increased size of the gastrocnemei, glutei, and erecter spinæ being due to constant efforts to attain the erect posture. He cited ten cases from the journals and various authorities to support his view, and traced in all, where post-mortem examinations had been made, destruction of the multipolar ganglion cells of the anterior cornua of the spinal cord. The affection was not to be confounded with the reflex paralysis of dentition where recoveries occurred, and it was a neuropathic, not a myopathic, affection. Its rational treatment (with doubtful results) was by electricity and exercise.—Dr. WHALLEY gave the details of a case of Rupture of the Right Auricle of the Heart. The case was that of the Rev. P. C. H——, who fell down in the General Wesleyan Conference after a speech in which he exhibited great emotion. The patient lived for twelve hours, the symptoms indicating lesion of the cardiac or great vascular walls. By post-mortem examination Dr. Whalley, under a pericardium distended with blood, discovered a sinus-like rupture of the right auricle, which permitted only the slow effusion of blood. Fatty degeneration was present, and the rupture was easily accounted for by the excitement of the speaker.—Mr. R. H. Meade cited a case. The patient, an old gentleman, had retired to bed in his usual good health. His servant left him only a few minutes, and on returning found him dead. A post-mortem examination disclosed a considerable rupture of the

right ventricle. There was well-marked fatty degeneration.—Dr. WHALLEY also communicated a case of Atresia of the Hymen. The patient was eighteen, and had never menstruated. She complained of ill-health, of lumbar and abdominal pain, and occasional retention of urine, for which she was treated by other practitioners without permanent relief. Dr. Whalley, on examination, found the whole vagina occluded by a dense, firm membrane, which bulged like the bag of membranes in labour; the abdomen also was enlarged from pubes to umbilicus. The swelling was tapped with trocar and cannula, a large quantity of treacle-like fluid withdrawn, and the opening enlarged by two lateral incisions. The patient did well, menstruated regularly afterwards, was married, and has since borne children. Dr. Whalley pointed his remarks by urging the necessity of examination in cases of amenorrhœa with periodical dysuria and retention.—The PRESIDENT said that in such cases dysuria was not a common symptom.—Dr. Tibbits cited the case of a married woman of forty, who had never menstruated nor borne children. She had attacks of hæmatemesis.—Mr. R. H. Meade stated a case of partial and the President one of almost complete occlusion, where menstruation had been conducted for years through an opening not exceeding a line in diameter, and which was treated with success.—In reply to Dr. Tibbits, the author remarked that in his case the hæmatemesis might have been vicarious, and an examination would probably have revealed atonia vaginæ.—The PRESIDENT, in illustration of the difficulty of diagnosis in some cases of Uterine Tumours, exhibited the uterus of a female, aged forty, who had died after fourteen months' illness, only developing near her death well-marked cachexia. The patient at first complained of failing health and of pains at menstruation, referred to the uterine region. Upon the first external examination a small tumour was detected at the upper and right side of the uterus; this steadily increased till death, becoming nodulated, and in form like a melon. A consultation with Mr. Spencer Wells failed to determine whether the growth was uterine or ovarian, and whether bland or malignant. Internal examination failed to detect uterine alteration, nor were there at any time vaginal discharges. After death, the tumour proved to be ovarian and malignant. The uterus, otherwise of normal size, was found in its fundus to contain a nodule of scirrhous character. Mr. R. H. MEADE made some observations on Intermittent Albuminuria, in reference to a case of his own, that of a young man whose urine contained albumen in the afternoon and night, but not in the morning; with the exception of a few transparent casts and oxalate, the urine was normal. The patient, though delicate and nervous, with a feeble heart, gave no evidence of disease. A singular fact was that during the effects of a severe accident which confined him two months to bed, the albumen entirely disappeared, but reappeared on his resuming work. Iron, quinine, and digitalis were given without much effect. Mr. Meade alluded to the cases recorded in the medical journals, and to the observations of Drs. Moxon, Gull, Rooke, Brunton, &c. The affection was common to young girls as well as men; Dr. Gull viewing it as dependent upon atony of the vessels and nerves, the albumen appearing during the pressure of the column of blood in standing, and disappearing in the recumbent posture. Dr. Rooke had obtained beneficial results from keeping his patients in bed. Mr. Meade showed the necessity of observing, and if possible tracing the cause of, the fact that albumen may appear in the urine without serious disease—as from mal-assimilation, or non-assimilation (e. g., taking excess of the white of raw eggs), and distinguishing this from the albumen flowing directly from the blood in Bright's disease, in which you must have the concomitants of nocturnal diuresis, œdema, pallor, &c. He expressed the opinion that these cases of intermittent albuminuria should be watched, for there was the possibility of these degenerating into Bright's disease after all.—An animated discussion followed the paper, Dr. Tibbits regarding the times at which the albumen appeared and the oxalate as evidence of mal-assimilation from over-feeding. Want of tone indicated the nitro-muriatic acid treatment.—Mr. Aston inclined to Dr. Gull's theory; the absence of albumen for two months when in bed, and its reappearance on getting up, favoured this view.—Mr. Appleyard said oxalate in the renal tubules might excite albuminuria, and mucous casts appear in the urine from catarrh, without renal disease.—The President had met with profuse albuminuria after continued chill, which under treatment entirely disappeared.—Mr. Mossop had found albumen in scrofulous disease, and from congestion and irritation without renal mischief.—Dr. Whalley favoured the view of Dr. Tibbits.—Mr. Meade, in reply, regarded Dr. Gull's view as best explaining this case, which was one not of mal-assimilation but atony. Nitro-muriatic acid had been given.

BRISTOL MEDICO-CHIRURGICAL SOCIETY.—At the last meeting of the Society, held November 27th, 1878 (Dr. F. Brittan in the chair), Dr. J. E. Scott was elected a member. Dr. Brittan proposed, Mr. F. P. Lansdown seconded, and it was resolved, "That the members of this Society desire to record their very high appreciation of the services of the late Mr. R. W. Tibbits as an original member of the Society and member of the Committee, and their deep regret at his untimely death, and that this resolution be recorded in the minutes."—Dr. E. L. FOX then opened the question raised by Dr. Spencer at the previous meeting as to the origin and pathology of "Pachymeningitis Spinalis Externa." Dr. Fox considered the specimens shown to be unique in various points, chiefly as to the limitation of the disease to the one membrane, and as to its diffusion over a large area of the spinal canal. Dr. Fox suggested one possible explanation of Dr. Spencer's case, which avoids the hypothesis of an "idiopathic" inflammation, that all the pus developed in different parts may have been a manifestation of previous blood-disease.—Dr. SHINGLETON SMITH exhibited a specimen of Aneurism of the Aorta involving the ascending portion of the arch, which had ruptured into the pericardium by a pin-point aperture, and had caused instant death, the pericardium being found to contain about a pint of fluid and clotted blood. Dr. Smith also exhibited a Heart in which the left ventricle had become much hypertrophied in consequence of a fibrous development in the wall of the aorta, immediately above the aortic valves; two fibrous masses had developed around the two coronary arteries, partially obliterating them. The patient died suddenly at the age of twenty-two, without a history of either syphilis or rheumatism.—A similar specimen was shown from a patient, who had also died suddenly, in which one nodular mass, looking like a fibrous tumour, had developed in the wall of the aorta so as to obstruct its orifice.—Dr. Fyffe gave statistics, from investigations made at the Army Medical School, as to the origin of such growths in the aorta. Of 114 cases, all under thirty years of age, 60 per cent. had a clear history of syphilis.—Dr. W. H. SPENCER exhibited a remarkable specimen of extra-uterine fœtation. The patient had been admitted for intestinal obstruction, and from this condition she died.

Reviews and Notices of Books.

A Manual of Anthropometry. By CHARLES ROBERTS, F.R.C.S. London: J. & A. Churchill. 1878.

THE author of this work has already published two papers on the physical development of factory children and other persons in the Journal of the Statistical Society (1876), and in St. George's Hospital Reports (1874-6). Partly from his own observations, but chiefly from the data supplied him by friends, he has constructed many elaborate tables of considerable value, and in the discussion of the results he has confirmed some previous conclusions and corrected others. He has, moreover, worked out certain definite relations between the stature and the weight of growing persons.

The object of the present "manual," as explained in the preface, is to excite a wider interest in anthropometrical statistics, and to encourage the accumulation of accurate details concerning the physical qualities of mankind in all parts of the world. The author's zeal is unquestionable, and the general idea and plan of his work are good, though the execution is eminently unsatisfactory, and, from certain points of view, invites serious criticism.

At the beginning of the book a valuable list of works of reference on anthropometry is given, acknowledged from Dr. J. H. Baxter's official reports on the military recruits of the United States (1875). These admirable reports contain the records of more than *one million* different examinations, giving *seven million* results, and requiring the use of over *fifty-*

seven million figures. Considering the rich store of authorities contained in this list, the first chapter, on the "Methods of Studying the Proportions of the Human Body," is not only meagre, but is almost exclusively limited to information obtained from Quetelet's "Anthropometrie" (1870).

Mr. Roberts very wisely follows Quetelet's statistical method of employing "means," instead of averages; and although he frequently quotes that master, his pages too often contain unacknowledged materials, and even sentences, from the work of the well-known Belgian statistician. For example, the second paragraph of this chapter (p. 5) is an echo of the very words of Quetelet (p. 62). From the treatment of the subject on p. 7, the reader might suppose that Mr. Roberts himself had detected Sir Joshua Reynolds's advanced views and correct principles on the subject of proportion, but these are expounded at great length, and with marked approval, by Quetelet (pp. 157–162). The account given of Carus's system of proportion (pp. 10–14) is mainly taken from Quetelet's narrative (pp. 135–8), in which it is partly printed between inverted commas, because it was directly communicated to Quetelet by Carus. The inverted commas appear also in Mr. Roberts's book, and the extract accordingly has the appearance of a quotation first-hand. It so happens that the name of the sculptor, Rietschel, who modeled Carus's statuette, is misspelt Rictochel by Quetelet, and even in this particular Mr. Roberts has been faithful to his copy, and not only here, but in the paper published in St. George's Hospital Reports. The paragraph in p. 23 of the manual concerning "The human type," &c., is identical with one in Quetelet (p. 26); but it may be added that the words "Chinese and Europeans," are substituted for "Le Lapon, le Cafre, et le Patagon." The sentence on p. 24, "It is for the purpose of fixing," &c., has the ring of Quetelet's, "Mon principal but," &c. (p. 22). Lastly, on reading page 21, it might be inferred that Mr. Roberts was the first to point out that Sir John Herschel had approved Quetelet's method of "means"; whereas Herschel's opinion is quoted in the "Anthropometrie" (p. 19) as having been previously published in a critical review (1850) of Quetelet's earlier labours. Indeed the expression used by Mr. Roberts, "M. Quetelet very properly insists on this difference," between means and averages, is the precise comment with which Sir John Herschel's own remarks begin.

Not content with making these numerous unacknowledged draughts on Quetelet, Mr. Roberts presumes to sit in judgment upon his teacher. He is of course compelled to admit that it is to Quetelet we are indebted for the idea of employing "means" instead of averages, but he has no stronger observation to make than (p. 20) that in this "consists much of the practical value of Quetelet's method." We have always thought it was the essence of this method. Although describing Quetelet's "mean" as "the mean result of a large number of actual measurements," he remarks, in commenting on ordinary statistics founded on simple *averages* and not *means*—"But this must necessarily be the case where a small number of observations is dealt with, as was the case with M. Quetelet, who, after measuring thirty individuals of the same age, divided them into three groups, and finding the groups so nearly alike, concluded that the measurement of ten regularly constituted models would suffice to determine the typical proportion for each age and sex. In this respect my tables show that M. Quetelet was in error, and to this must be attributed the differences which occur between his results and mine" (p. 22). Now, in the first place, Mr. Roberts certainly seems to imply that Quetelet used *averages*, and not *means*, which is not true. Secondly, M. Quetelet (p. 23) did not find the groups of ten, but the *means* of the three groups alike; and it was on this coincidence of "means" that he relied for using so small a number as ten persons for each age in his laborious and extensive researches on the rate of growth of the body and of its various parts from birth to the adult state amongst the population of Belgium. Thirdly, in applying his method to that of other persons, Quetelet did employ very high numbers; as, for example, in his table (p. 239), in which appear, besides others, the results of the measurements of 25,875 United States soldiers published by Elliott (Berlin, 1865), and of 37,069 Italian soldiers of twenty-one years of age furnished by M. Bodio (1869). Fourthly, speaking generally, the differences between Quetelet's and Mr. Roberts's results, as regards stature, are comparatively slight—a fact admitted in the St. George's Hospital Reports (p. 20), and which might fairly have been repeated here. As a matter of fact, the differences in question are probably due to national peculiarities rather than to defects in the mode of observation.

Considering how deeply Mr. Roberts is indebted to Quetelet, not merely for his method, but also for his matter, his criticism and implied censures are alike ungracious and ungrateful. Still less excusable are the numerous misrenderings of Quetelet's meaning. At p. 6, in a quotation from Quetelet (p. 412), the expression "J'ai essayé de donner..... un aperçu" is translated "I have tried to gain a glimpse"; and the phrase is so rendered also in the St. George's Hospital Reports, p. 5. In p. 17 the author translates the word "moyenne" by "average," exactly where, of course, Quetelet means his "mean."

Passing by the second chapter, which contains a tolerably clear, concise, and useful account, with illustrations, of the apparatus needed for making accurate anthropometrical observations, we come to the third and fourth chapters, which are devoted to an explanation of the author's "anthropometrical chart" which faces the title-page, and to an account of the "systematic table of measurements" recommended to be taken of various parts of the body. Notwithstanding the explanation in the preface, that all the measurements (which are, for the most part, selected from Quetelet) need not be taken, the chart is far too elaborate, and the measurements too numerous (being fifty-one, with five extra measurements on each person).

The fifth chapter, although entitled Relative Proportions of the Body, consists really of a discussion of the relation between height and weight of growing boys, founded on the observations of Mr. Steet and others, and serving chiefly to illustrate Quetelet's method of obtaining "means" in place of "averages." Omitting many minor instances, the most obvious appropriations occur in the seventh and last chapter. It is true that Quetelet's name is thrice mentioned in it, and that a foot-note at the beginning of the chapter refers the reader to p. 253 of the "Anthropometrie" for further details. But why not say the "summary of what we know" is itself practically abstracted from the earlier pages of that work (pp. 180–235). That this is so we shall proceed to indicate. The numbers expressing the ratio of stature in the two sexes (p. 96) are Quetelet's (p. 180); the paragraph "The height of woman," &c. (p. 97), is Quetelet's "La stature de la femme," &c. (p. 180), the succeeding remarks being also adopted from that writer. The conclusions concerning giants and dwarfs, and the comparison of Tom Thumb's proportions to those of a child thirteen or fifteen months old (p. 103), are to be found in Quetelet (pp. 302–5). The statements concerning the head (pp. 108–110) are in Quetelet (pp. 205–211), but their order is much changed. The account of the neck (p. 110) is in Quetelet (p. 220), and that of the trunk (pp. 111–113) is also his (pp. 223–7). The important general conclusions of Quetelet, founded on an enormous number of observations as to the relative ratio of increase of the various parts of the human frame (p. 223), are adopted almost verbatim (p. 111, par. 2). The remarks about the umbilicus and the mid-point of the stature (p. 112) repeat those of Quetelet (p. 226), and the special reference to woman (p. 113) is also traceable to him (p. 239). In the section on

the upper extremity, the sentence, "It is generally believed &c." (p. 113), is Quetelet's (p. 231), and the several ratios given (p. 114) are also his. "The length of the arm &c." (p. 114) is in Quetelet (p. 228), the account of the peculiarities in the growth of the forearm and arm (p. 114), and the characters of the biceps muscle (p. 115), are also to be found in the "Anthropometrie" (p. 239 and p. 229). The description of the lower extremity and its parts (pp. 115-118) are equally close adaptations of Quetelet's phraseology as well as of his facts (pp. 232-235). Even the closing note in this manual, in small type (p. 118), including the parenthetical (volto), is a literal transcription of Quetelet's sentences (pp. 108-9). In this chapter (p. 109) we note, moreover, "incisure nasale" translated "nasal incision," instead of our familiar nasal notch, which is stated to be in the middle line of the "face" in the adult, instead of in the middle of the entire *head*, as Quetelet indicates. At p. 111, "entre les hanches et entre les trochanters," is rendered, "and the hips at the trochanters."

Turning now to the illustrations, we find that whilst Fig. 2 (p. 51) is acknowledged in a roundabout way from Kirkes' Physiology (after Hutchinson), Fig. 1 (p. 49) is taken without acknowledgment from Quetelet's figure of the head (p. 206),—even a diagonal line, which shows "la plus grande diametre de la tête," that is, from the chin to the most distant part of the vertex, being copied, though there is no reference to it in the text, the measurement itself being unnoticed. Again, the outline "figure of a young man" in Mr. Roberts's chart, with the words "C. Roberts, *invenit*," beneath, is, with a change of position of the right arm, a transcript, size for size, of the figure of a man, twenty-two years of age, in Quetelet's plate. It is, however, but fair to point out that *invenit* may be rendered "has procured," and this may be the sense in which Mr. Roberts uses the word. But apart from being unavowed, the appropriation of this figure is very unhappy, so far as a character for fitness and accuracy is concerned, neither of which qualities are, we presume, altogether foreign to a manual professedly written for students and artists. It is an ungainly large-headed figure, being only 6¾ heads in height, and its mid-point is too far above the pubes. It does not correspond with Quetelet's own measurements of a man at the age of twenty-two (see his table, p. 207), much less with the longer-limbed population of this country.

Of the three "diagrams or chart tracings" interpolated in the last chapter, Nos. 1 and 2 are similar in construction to those at the end of Quetelet's work, but No. 3 is certainly novel.

Diagram 2 (after p. 96) is intended to show the annual rate of growth from birth to thirty years of age of the body and certain of its parts in a *typical or mean male in this country*. There is no allusion in the text or tables to the observations on which the diagram is founded; but it is a repetition, more neatly executed, of a diagram given in St. George's Hospital Reports, p. 38. Nor is there any mention in the latter paper of any special data beyond the remark, "My results, with regard to the proportions which the various parts of the body bear to each other, are so nearly identical with those of Quetelet that I think they are equally applicable to the English and Belgian people." It is to be regretted that the number of persons of each successive age on whom the parts mentioned in the diagram have been measured is not stated, as we could then have better compared the results with those of Quetelet's thousands of measurements of the same parts, the work of twenty long years of patient industry and accurate observation. At least Mr. Roberts might have presented us with a condensed table of his data. We are the more curious in this matter because certain records in Diagram 2 appear contrary to nature. For example, the length of the adult thigh, which is marked on the chart with the number 41, and defined in the "table of measurements" (p. 55) as reaching "from the trochanter to the lower edge of the patella," is indicated as measuring a little more than 15 inches; whilst the length of the adult leg, marked 42, and defined as extending "from the lower edge of the patella to the internal malleolus," is given in the chart as rather more than 15½ inches. This would obviously assign nearly equal lengths to the femur and tibia, whereas the *typical or mean proportions* of these bones in this country are nearly as 18 to 14 inches. Are we to conjecture that, after all, the tracings on this chart, though said to be applicable to a typical Englishman, are really adapted from Quetelet's figures? And not only so, but erroneously adapted, for although Quetelet's measurement of the thigh is really 15·75 inches, and that of the leg 15·35 inches, he measures the one down to "the centre of the patella," and the other from that point downwards, and not to and from the lower edge of the bone. This makes a great difference, for it allows more than 17 inches for the femur, and less than 14½ for the tibia. But even if our conjecture be wrong, the author is scarcely justified in alleging that "artists engaged in representing the human form may accept the tracings on Diagrams 2 and 3 as scales of proportion," &c. (p. 93 note).

But why not rely on Diagram 3? This is intended graphically to represent the development of the body from birth to thirty years of age, in diameter and circumference. It is not stated in the Manual whence the data are derived, but in the St. George's Hospital Reports, where the diagram occurs on a smaller scale, it is said to be from Quetelet's measurements. Continuous lines in this diagram indicate the transverse diameters, and dotted lines the circumference, of the several parts mentioned, at different periods of life from birth to thirty years of age. The continuous lines, it is said (p. 93), show "the space which would be covered by the body if laid flat on the table, by the head, the shoulders, the chest, the abdomen, and the hips." Now, following these instructions, we find that the transverse diameter of a baby's head is shown to be rather more than 10 inches! and that the adult cranium ought to measure nearly 20 inches across, the circumference being exactly 3 ft. 9 in.!! The same instructions are given as to the use of the smaller diagram in the Hospital Reports, but owing to a difference in the marking of the inch distances, the infant's head is there shown to be only 5 inches and the adult's 10 inches wide. This is one-half better, and it is well to know that these diagrams will help artists to "place some reasonable limits to their imaginations" (p. 93). After this, how just the censure: "Year by year many of our English artists are departing farther and farther from the natural proportions and formulæ adopted and taught by the most distinguished artists of the Renaissance"! Notwithstanding Mr. Roberts's supercilious and dictatorial tone, we are inclined to think that he is scarcely just in charging modern artists with departing from the formulæ of the distinguished masters of the Renaissance because they do not represent the head of a normal adult man as nearly two feet in diameter. We fancy we can tell where the author has gone astray, although we are reluctant to follow up the ugly hint. Once more, we fear, Mr. Roberts's knowledge of the French language has failed him, for we are compelled to declare that here again he has appropriated Quetelet's conclusions, and has blundered in the act. The proper transverse diameter of the head "par les tempes" is given by Quetelet (table, p. 420) as 100 millimetres, or about 4 in., for the infant at birth, and 154 mm., or about 6 in., for the adult; but Mr. Roberts has mistaken for this proper width Quetelet's "plus grande diametre de la tête" (p. 420), measured from chin to vertex, inasmuch as Quetelet's "greatest" diameters of the infant's and the adult's head accord with Mr. Roberts's unfortunate diagram, being respectively 134 mm., and 230 mm.—that is, 5·25 in. and 9·85 in.

Mr. Roberts is evidently a man of figures but not of facts. He may be commended as a laborious statist, but he cannot be trusted as a guide in the history, knowledge, and investigation of anthropometry. Nor can our criticism end here, for as thirty pages of the Manual are abstracted from the author's paper in the St. George's Hospital Reports, we cannot refrain from expressing surprise at the admission of so large an amount of imperfect compilation in such Reports, unless, indeed, the editors believed, as the apology in their preface (p. vi.) would seem to imply, that there was more originality both of material and commentary in Mr. Roberts's work than it really contains.

THE HEALTH OF LONDON IN 1878.

THE last weekly return of the Registrar-General, being the fifty-second of 1878, enables us to summarise some of the mortality statistics for the year, with a view to compare the health of the metropolis during 1878 with that which prevailed in preceding years. During last year 129,184 births and 83,695 deaths were registered in London; the births exceeded by 1927, and the deaths by 6693, the numbers returned in 1877. The birth-rate was equal to 36·2 per 1000 of the estimated population, against 36·1 in the preceding year, evidence that the increase of the metropolitan population is being steadily maintained. The rate of mortality was equal to 23·5 per 1000, and exceeded the low rates that prevailed in 1876 and 1877, which did not exceed 22·3 and 21·9 respectively. The rate of mortality in 1878 exceeded by 0·8 per 1000 the average rate in the seven preceding years 1871–7. If we analyse the rate of mortality a little more closely, we find that 14,734, or nearly 18 per cent. of the 83,695 deaths, were caused by the seven principal zymotic diseases, which most sanitarians agree in calling preventable. Of this preventable mortality 4446 deaths were due to whooping-cough, 3651 to diarrhœa, 1792 to scarlet fever, 1510 to measles, 1416 to small-pox, 1361 to fever, and 558 to diphtheria. These 4446 deaths were equal to an annual rate of 4·1 per 1000, exceeding the rate from the seven zymotic diseases in any year since 1871, when the severe epidemic of small-pox raised the rate to 6·0 per 1000; the zymotic death-rate in the six years 1872–7 did not average more than 3·6 per 1000. The principal feature of the metropolitan zymotic fatality in 1878 was the unusual epidemic prevalence of whooping-cough, which caused a considerably higher death-rate (equal to 1·3 per 1000) than in any previous year of civil registration. Previous to 1837, however, no completely trustworthy records of mortality exist. The high summer temperature in the latter part of June, and in July, caused the increased fatality of diarrhœa last year, and the death-rate from this disease was higher than in any year since 1873. The fatality both of scarlet fever and of measles was below the average, whereas the death-rate from diphtheria showed a considerable excess, and was equal to that which prevailed in 1875—the highest rate in recent years. The deaths from small-pox in London, which had been 75 in 1875, 735 in 1876, and 2544 in 1877, declined again to 1416 in 1878, of which 1174 occured in the first, and 242 in the second half, of the year. It may be noted that in the outer ring of suburban districts around London 151 other fatal cases of small-pox were recorded in 1878. Outside the metropolis, the fatality of small-pox in England and Wales was unprecedentedly low during last year. The fatality of fever (which caused 1361 deaths in 1878) somewhat exceeded that which prevailed in any of the three preceding years, although it was below the fatality in any of the five years 1870–74. That the death-rate from fever in the metropolis should have steadily, though slowly, increased during the past three years, affords an unsatisfactory commentary upon the sanitary condition and organisation of the metropolis. The rate of infant mortality last year was equal to 164 per 1000 of the births registered, whereas in the two previous years it had not exceeded 157 and 146 per 1000 respectively. Infant mortality in London last year was, indeed, higher than in any year since 1871—a result due mainly to the fatal prevalence of whooping-cough and diarrhœa. On the whole, therefore, the London mortality statistics of 1878 afford no sign of sanitary progress, the public health in the metropolis being less satisfactory than it had been in the several preceding years. The apathy which the too numerous and disjointed metropolitan sanitary authorities displayed in the face of the recent small-pox epidemic, and the anxiety they exhibit to shift their responsibility with regard to the prevalence of zymotic disease, suggest that a radical reform is needed in the sanitary organisation of London ere we can reasonably hope that the present stagnation in metropolitan sanitary matters shall give way to renewed sanitary progress. In several respects the sanitary government of London is now far behind that of many of our large provincial towns.

HEALTH OF THE NAVY.

IN the columns of THE LANCET of Dec. 18th, 1875, we remarked that "the Medical Director General, true to his word, has this year given to the public his statistical report at a much earlier period than formerly." It is satisfactory to state that this plan has been continued to the present date, and we have now before us the usual bulky volume, representing the bills of sickness and mortality for 1877, as regards Her Majesty's forces who fight for us afloat. Mr. J. Russell Pickthorn, Inspector General R.N. (who is responsible to Sir Alexander Armstrong for the compilation of the report submitted by the latter to the Lords of the Admiralty), recites in his summary that the death-rate from all causes during the year 1877 was 7·05 per 1000, and from disease alone 4·92 per 1000; these rates being the lowest ever recorded in these annual reports. A special table has been introduced this year, showing the source of the diseases against which the Contagious Diseases Acts are directed, from which it is seen that a preponderance of the more serious forms of disease is due to infection at places unprotected by the Acts. On the home stations there was a general improvement in the health of the forces, though remittent fever was somewhat prevalent among the men in the Mediterranean. All forms of fever were much less prevalent in the North American and West Indian stations, not a single case having appeared in the returns of those vessels stationed on the south-east coast of America. The Pacific stations exhibit also a considerable reduction in the invaliding and death-rates, although there were more cases of accident. The milder type of fever prevailing on the West Coast of Africa during 1877, especially around the Niger, materially reduced the mortality in the ships on that coast. But on the East India station there were serious outbreaks of fever, both of the continued and remittent type, and cholera appeared in a vessel lying at Bombay, where at the time the disease was epidemic. This disease was also epidemic in the ports of Northern China and Japan, but attacked only two of our ships, each of which had three cases, and three of which terminated fatally. A slight outbreak of small-pox occurred in two vessels lying at Sydney, the history of which is worthy of a distinct notice. The medical history of the irregular force was throughout the year quite uneventful.

The summary of statistics shows that the report deals with a total force of 44,940 officers and men, the average number of persons sick daily being 1924·28, or at the rate of 42·81 per 1000, representing a reduction as compared with last year equal to 4·93 per 1000. The total number of cases of disease and injury entered on the sick-list during the year was 50,583, or a ratio of 1125·56 per 1000, a ratio less than that of the previous year by 72·12 per 1000. The average length of treatment of each case, both afloat and ashore, was 13·88 days, and the total number of days' sickness 702,363 days, giving an average loss of service for each man of 15·62 days, or a comparative decrease of 1·85 days. There were 1613 persons invalided during the year, or 35·89 per 1000 of force. A total of 317 deaths occurred, 221 of which were from disease alone, which is less than in the previous year by 1·07 per 1000.

The report contains a variety of interesting details as to certain diseases that have occurred at particular stations, but there is a conspicuous absence of special papers contributed by individual members of the Medical Department, which we always look for with great interest, and to which we gladly give prominence, because they almost invariably show the good results of much painstaking work accomplished frequently under difficult circumstances.

THE LANCET.

LONDON: SATURDAY, JANUARY 4, 1879.

WE have the high authority of the Prime Minister for the assumption that the maintenance and improvement of the Public Health, by progressive enactments and energetic reforms of the administrative departments, is, in the policy of the present Government, an object of the first moment and pre-eminent concern. Against this declaration stands the indisputable fact that, beyond the consolidation of statutes passed before the Conservative Ministry was constituted, an exceptionally long term of office has been distinguished by no measure of great sanitary moment; and if the reins of government had fallen from the grasp of the party now in power at the close of 1878, the country would not, from a medical point of view, be able to show a single proof that the redemption of the promises made at the last general election had been even attempted. Why is this? The time to ask the question seriously has certainly arrived. Another appeal to the constituencies cannot be far distant, and it would be little short of reckless to tempt the fate of the ballot-box with the medical profession, as a body, aggrieved and affronted by neglect. We can make every allowance for the preoccupation of the Government with foreign anxieties. The Opposition has clearly made out no claim to confidence by its policy. It has embarrassed and distracted the Ministry by a lukewarm support in great emergencies, with the obvious effect of diverting attention from the needs of the home population. It is only just to make this admission. Nevertheless, we cannot excuse a Government which professed so much regard for the interests of health from the obligation of justifying its pretensions; and the opportunity that remains is barely sufficient for the proof that the protestations made in 1873 were not mere words without weight or practical meaning.

It would be difficult to name a department of the administration in which the claims of preventive medicine have been adequately acknowledged. Bills have been passed through Parliament for a great variety of purposes, and changes amounting to reconstruction carried into effect without the observance of the most ordinary precautions for the preservation of health, and in utter indifference to the precepts of medical science. A historic enterprise of exploration has failed, and the field it was intended to occupy left to be a prize of some other nation, because the counsels of a medical officer were unheeded. Lives have been sacrificed by the reckless occupation of new territory in disregard of the most ordinary principles of hygiene, and without even so much as asking the co-operation of the constituted medical authority. The scale of dietaries and the discipline of our prisons have been made the subject of sweeping change in contempt of the advice and warning tendered by men qualified to form a definitive judgment. These high-handed proceedings do not, it must be confessed, afford much ground for hope in the sagacity of a Government which has nearly passed through its lease of power without fulfilling some of its most pressing covenants. If the tenure of office is to be renewed, there must be something to show at the end of the session on which we are entering.

The coroner's court, the system of private lunatic asylums, the medical departments of the army and navy, the Adulteration Acts, the system of medical relief for the sick poor, the better enforcement of measures for the extermination of preventable disease, medical reform, and many other subjects, wait the practical attention of the Government, and a half-hearted policy will not restore the confidence of those who view these matters in the matter-of-fact light of need and urgency. It would be well for the Government and well for the people, if the topics to which we have adverted, and others of not less pressing import, could be subjected to an unofficial scrutiny. The aspect too many of these matters are made to assume in Parliament is widely different from that presented by the exigencies they represent, as forced on the population. Subjects which are discussed coldly in the House of Commons, and excite no interest in the Lords, often involve the highest concerns, reaching to the issues of life and death in the community. Only those who are engaged in the struggle with disease, and vice, and poverty, in their strongholds can tell how directly the provisions the Government and the Legislature are asked to adopt concern the well-being and prosperity of the country. When some statesman shall light on the discovery that Public Health ought to form an integral part of the policy of an Administration, and secure the services of a Minister of Health in the Cabinet, the truth will be known about the observance or neglect of sanitary precautions. When that time comes, "*Sanitas sanitatum, omnia est sanitas*," will be found to be the simple statement of a fact, not the least important, in political economy. For the present, we can only appeal to the Government of the day not to forget its obligations, or wholly disregard the undertakings by which it is pledged.

THE action of the palatal muscles on the Eustachian tube is the subject of an interesting lecture delivered by Professor LUCAE to the Physiological Society of Berlin, and published in a recent number of VIRCHOW'S *Archiv*. A short time ago, in the same journal, LUCAE recorded some observations on an individual whose nasal cartilages had been destroyed by lupus, which observation went far to decide the much-disputed question of whether the Eustachian tube is permanently open or closed. They confirm the statement of many previous observers that the tube cannot be regarded as permanently open. It is rather loosely closed, and opens in different individuals with different degrees of readiness on the occurrence of variations in the pressure of air in the pharynx and tympanic cavity respectively. During the act of swallowing, the tube is, as MICHEL maintained, closed, and it is also closed during phonation. The observations seemed to show that the view that the tensor opens the tube during the act of swallowing is erroneous, although the muscle probably assists in opening the tube at the end of the act of deglutition, as soon as the action of the levator is over, and the soft palate again falls. During deglutition, phonation, aspiration, and forced breathing, the raised palate presses together the lips

of the opening of the Eustachian tube, and thus air is forced towards the middle ear.

In his recent lecture LUCAE has given the results of his investigation of two other cases in which the nasal cartilages were destroyed. The changes to be observed in the mouths of the Eustachian tubes during movements of the soft palate were exactly the same as those seen in the former case. When the palate was raised the lips of the tube were pressed together, and were separated when the palate fell. No movement could be perceived in the anterior lip, but the cartilaginous rim was each time moved from the anterior lip towards the posterior wall of the pharynx, whilst the floor of the tube was pushed into the triangular space thus formed. During this action, if there was a drop of fluid in the mouth of the tube, it was moved towards the middle line of the body, especially during the powerful elevation of the palate which occurs during the act of swallowing. The defect of the alæ nasi was in one case so great as to permit the introduction of a small laryngoscopic mirror, by which a direct view of the mouth of the tube was obtained; and it was seen that during rest and ordinary respiration there was only a small furrow, which, when the soft palate was raised in deglutition and phonation, became almost obliterated. On the ground of observations on the pressure on the middle ear during deglutition, LUCAE thinks it highly probable that external closure of the tube is associated with an internal dilatation, either by simple mechanical inflation or simultaneous action of the tensor palati *seu* dilator tubæ, but no direct proof of this has yet been given. The closure of the tube, when the palate is raised, is no doubt the reason why, when fluid is injected into the nasal chamber—by which a reflex water-tight closure of the posterior nares by the palate is produced,—no liquid gets into the Eustachian tube, unless the patient swallows while the douche is being employed. But why, it may be asked, should fluids pass into the tube during the act of swallowing if the tube is closed? It must be remembered that deglutition is a complex action. Physiological treatises are silent on the question of the exact time at which the palate is raised. LUCAE has endeavoured to answer the question by a method devised by CZERMAK for the study of the movements of the palate during phonation. A curved wire was so placed in the nasal cavity that the curved portion lay upon the soft palate, the movements of which were shown by the projecting part of the wire, to which a long straw was attached. It was found that, as GENTZEN observed in a case in which the palate was exposed by the removal of an orbital tumour, the palate was raised progressively in the passage through the series of vowels—*a*, *e*, *i*, *o*, *u*. At the commencement of deglutition the palate was raised as high as in the pronunciation of *u*, and the fall of the palate, and therefore the opening of the mouth of the Eustachian tube, coincided with the contraction of the constrictors of the pharynx and the last portion of the act of deglutition proper. It does not therefore succeed deglutition, but occurs during the last portion of the act, and hence the passage of liquids at this time into the tube from the nose. These observations have led to certain contrivances for maintaining the closure of the tube during the employment of the nasal douche, so as to avoid the risk of the awkward accident of the passage of liquid into the middle ear. FRAENKEL, for instance, recommends that the patient should be made to pronounce the vowel *u*, while STÖRCK advises water to be kept in the mouth ready to be swallowed without being actually swallowed, which leads to elevation of the soft palate only. The observations show also that the end of the act of deglutition is far more favourable than its commencement for the forcible inflation of the Eustachian tube and tympanic cavity by the method of POLITZER.

THE new year opens with brighter prospects than any of its immediate predecessors for the officers of the Army Medical Department. Their grievances have been inquired into and reported upon, and various measures have been recommended for their removal. The ten years' service scheme introduced by Lord CRANBROOK has been pronounced by his own chosen advisers to have been a failure, and its abolition has been recommended, in addition to several alterations calculated to remove the objections of young medical men to enter the public service. The present organisation of the Department, known popularly as the unification scheme, has been long enough in operation to show its practical advantages, and has been found to work so well that many of its early opponents have changed their views, and now hold that "a return in any degree to the regimental system would not only be disadvantageous to the Medical Department, but to the service at large." Our latest information from Afghanistan shows that it has worked in that country up to this time very satisfactorily, notwithstanding the drawback of it having been adopted at the latest moment. The measures proposed for the amelioration of the Department may be briefly summarised as being, with regard to candidates, the abolition of the limited service system, the discontinuance of the entrant examination, and an increase of pay during their probationary course at Netley; and, as regards the officers, increase of full and of retired pay, right of retirement without appearing before a medical board, with a gratuity under twenty years' service, and permanent retired pay after that period; longer sick leave on full pay; the creation of brigade surgeons, a rank between the surgeon-major and deputy surgeon-general; a fair share of honours and good-service rewards, and the classification for that purpose of medical with combatant officers instead of with the administrative departments; and certain modifications in relative rank. If to these improvements were added a condition that no provision contained in a Royal Warrant should be overridden by confidential memoranda or anything but a Royal Warrant, and that no change in existing regulations should be valid until published in the Army Circular, we think the Department might fairly expect to regain the position it once held in the estimation of the profession. We regret that among the recommendations the restoration of forage allowance to the field officers of the Department has not been included, as we foresee that the distinction thus established between them and the combatant field officers will be a future source of discontent and trouble. We trust that the Secretary of State for War will no longer delay introducing these much-needed changes. Every week which passes without anything being done adds to the difficulty of a satisfactory adjustment of the claims of the Department.

THE interest excited by the discoveries made in Helminthology in 1877 has greatly increased during the past year. This result has been due not so much to the creation of fresh points of departure in the science as to the confirmation and extension of facts and views which had already been accepted. What we advanced in respect of the *rôle* of filariæ in the production of diseased conditions has received abundant confirmation, and, perhaps, it is not going too far to state that the ultimate benefits accruing to the human race from the united labours of helminthologists are destined to eclipse those long ago secured by the single discovery of the immortal JENNER. As regards the distribution of honours, we think the *savans* of the present day are a little too sensitive; but in the matter of *Filaria sanguinis hominis*, or *F. Bancrofti*, or *F. Wuchereri*—call it what you will,—we all know to whom science stands most indebted. With WUCHERER rests the initiatory "find"; with LEWIS remains the supreme honour of first detecting the young parasites in human blood; with BANCROFT the discovery of the sexually mature worm; with MANSON the finding of the intermediate host, and the description of the developmental changes undergone by the filariæ during their short stay within the body of the mosquito. Many other labourers have either verified or have in other ways powerfully contributed to advance these remarkable discoveries. Amongst the Brazilian physicians the names of Drs. ARAUJO and F. DOS SANTOS occur, as verifiers of BANCROFT'S discovery, which was also verified by LEWIS independently. In a letter recently received from Dr. DA SILVA LIMA, who has himself largely contributed to the diffusion of correct views on this subject, the Bahia *savant* announces the further verification of LEWIS'S discovery by Dr. ARAUJO, who detected filariæ in the fresh-drawn blood of a French priest, "otherwise in good health;" and he also announces the yet further "find" on the part of Dr. ARAUJO of "embryos of *Filaria Bancrofti* in the blood contained in the stomach of the muricoca (the common name in Brazil for the mosquito, or culex, which is very abundant here)." Dr. DA SILVA LIMA may be pardoned for speaking with some enthusiasm of his "young and studious *confrère*," seeing that it has fallen to Dr. ARAUJO'S lot to confirm by his own individual labours all the separate special discoveries of LEWIS, BANCROFT, and MANSON. Into the "pathological significance of human filariæ"—as LEWIS so aptly expresses it—we must, from the extent of the subject, at present forbear to enter. Those who are acquainted with what has been written in our own pages, and in those of other English periodicals, scientific and professional, do not need to be reminded of the supposed etiological connexion of these parasites with such disorders as hæmaturia, chyluria, elephantiasis, craw-craw, lymphoid affections generally, and even leprosy itself. So far as the investigations have advanced, little or nothing concerning them has been omitted by our best English authorities; but, if we may be permitted to single out any foreign memoir as especially worthy of attention, we must pronounce Dr. BOUREL-RONCIÈRE'S contributions to the August and September numbers of the *Archives de Médecine Navale* as the most complete and exhaustive summary that has yet appeared. (*Pathologie exotique. De l'hématozoaire nématoïde de l'homme et de son importance pathogénique d'après les travaux Anglais, et Brésiliens des dernières années.*) Dr. BOUREL-RONCIÈRE closes his admirable record in the following words:—"The way has been brilliantly opened by English and Brazilian physicians. Let our colleagues in the French colonies put their shoulder to the wheel; they have before them a vast field of study to explore."

The great importance of these filariæ precludes our entering upon other advances that have been made during the past year in this fertile branch of biology. We cannot close our notice of this subject without expressing our sense of the active and important part played by our indefatigable labourer at home, Dr. COBBOLD. Our own pages and those of the *Linnean Journal* have recorded his work in connexion with *Filaria Bancrofti*, and in the Transactions of the Pathological Society Dr. BANCROFT has made honourable acknowledgment of his indebtedness. It is generally understood that he has relinquished practice in order to advance his favourite pursuit, and to embody what is known of the parasites of man and animals in a new treatise.

MR. W. GILBERT has raised such a cloud of dust that it is not easy to see the purport or utility of his article on "the London Medical Schools," which appears in the current number of the *Fortnightly Review*. Had there been less vituperation and misrepresentation and more mastery of facts in his paper, he might have been credited with a desire to promote the best interests of the medical profession, and to enhance the welfare of the public. Even as it is, and notwithstanding his *gaucherie*, it is difficult to believe that he is not actuated by a generous impulse, although the way in which he exhibits his kindness is more emphatic than pleasant. In order to awaken interest in the subject of hospital reform, Mr. GILBERT cites the moral depravity and the vulgarity of medical students as the results of the carelessness or indifference of "teachers and the bad organisation of our medical schools." He begins by observing a startling contrast between the "justly respected" medical practitioner and the "ungentlemanly" student, whose chief occupation seems to be "seriously assaulting unoffending persons," and frequenting music-halls and other dens of iniquity. At first intelligent, thoughtful, and diligent, the medical student, according to Mr. GILBERT, gradually degenerates into a boisterous, idle ruffian, squandering "the modest sums" supplied him by his friends on unworthy objects, and becoming at length utterly reckless and indifferent. Happily this woful change is in no way connected with the "natural manners and habits of the students themselves," but is the outcome of a vicious system of organisation of our metropolitan schools. To such a bad eminence have the London medical students been raised, "that during the last year no fewer than four hundred, out of two thousand medical students in London, have come, directly or indirectly, under the notice of the police." A statement so obviously untrue does not deserve serious consideration.

THE Lettsomian Lectures for the present year will be delivered at the rooms of the Medical Society of London, in Chandos-street, Cavendish-square, on Jan. 6th and 20th, and Feb. 3rd. The lecturer, Dr. J. C. Thorowgood, has chosen "Bronchial Asthma" as the subject of his course.

Annotations.

"Ne quid nimis."

THE TROOPS IN CYPRUS.

THE stirring events of the Afghan war have so completely occupied the attention of the public during the past few weeks that Cyprus appears to have been blotted from its memory. Mr. Brassey, in an able letter to *The Times*, has recalled attention to it by discussing what our duty is with regard to it, and how that duty is to be done. We should not have deemed it necessary to refer to this letter, but for the circumstance that it brings to light incidentally some facts connected with the health of the troops. It appears that when they were sent to the island they were put under canvas, in consequence of there being no barracks or large public buildings suitable for their occupation. "My informants told me," says Mr. Brassey, "that they slept for three months without mattresses, after spending the day exposed to the sun. They lay down on a blanket spread on the bare ground. After a short interval of ten minutes their heated bodies were bathed in a cold sweat, and every morning there were more victims to the malarial fever." Why were the tents sent from Malta without flooring? Or, if there were any sufficient reason for this, why was not an adequate supply of waterproof sheets and of mattresses provided? For these the Ordnance Store Department were responsible; but we should like to know whether any steps were taken by the Quartermaster-General's department to see that such necessary supplies were provided, and whether Sir Garnet Wolseley took any measures to counteract the bad effects of this neglect. To land troops on an island which was known to be fever-stricken, without making any provision for placing them in healthy quarters, or, if it were necessary to encamp them, of protecting them from the effects of the damp ground and the emanations from the soil, argues either gross ignorance of what was necessary to shield them from well-known causes of disease, or culpable carelessness as to their efficiency and sanitary condition. Mr. Brassey has made some severe remarks upon the Commissariat department, which, "as usual, broke down under the strain," and has offered some practical suggestions for its improvement. Into these it would be out of place here to enter. We can only express a hope that Colonel Stanley will turn his visit to Cyprus to account by seeing that all necessary steps are taken in time to have the troops properly clothed, comfortably and healthily quartered, and well supplied with good, sufficient, and suitable food, before another hot season sets in. For, if in any of these respects there is a shortcoming, it will be difficult to persuade the public that inefficiency of the heads of the military departments has not been the chief cause of the sufferings of our soldiers.

THE EXECUTIVE COMMITTEE OF THE GENERAL MEDICAL COUNCIL.

THE Executive Committee of the Council is summoned to meet again on Wednesday, January 8th. It may be surmised that these frequent meetings are not without reference to the duty imposed by the Council on the Committee of considering the constitution of the Medical Council. These meetings have been so frequent, and in such quick succession, that we may indulge the hope that the Committee is going seriously into the question, and will be able to lay before the Council, at an early meeting, some definite and satisfactory proposals. The profession will await the result of these deliberations with much interest and perhaps a little impatience. The report of the Committee will, of course, only constitute a basis for discussion by the whole Council. We have already entered on a new year, and time is of great moment. Under these circumstances we may expect an early meeting of the Medical Council. It is most desirable that this subject should be disposed of. The essential work of the Council is virtually stopped by it. It requires little imagination to suppose that, with the registration of 2500 dentists on hand, and the endless demands on the time of the Council from foreigners claiming to be registered under Clause 3 of Section 6 of the Act, the strictly medical work of the Council and of its officers has been almost interrupted. We know the teeming plentifulness of medical schools and colleges in the United States, and we can only pity the registrar and members of the Council, in having to investigate the validity of all their diplomas. Not the least urgent question which the Council will have to consider is whether it should continue to administer the Dentists Act, and whether it can do so without still more grievous failure in its own work than hitherto.

"WOUND TREATMENT."

THE clinical lecture of Mr. Sampson Gamgee, in THE LANCET of Dec. 21st, is worthy of the serious study of all surgeons. Wound treatment is the uppermost question at the present time, in surgery. Manipulative skill is, as Mr. Erichsen has said, almost perfect. But, when this has done its best, the chief risks of surgery begin. Whether we believe in antisepticism or not, we must all allow this. Mr. Lister, in a letter which we publish elsewhere, takes exception to that part of Mr. Gamgee's lecture in which he represents Mr. Syme as not having got further in the treatment of wounds than to believe the water-dressing perfect. He is right in saying that Mr. Syme had other notions, at any rate, in the later part of his life, of the way in which great wounds should be dressed. But Mr. Gamgee's lecture raises a far greater question than that of Mr. Syme's views. It touches Mr. Lister's own views, or, to speak more correctly, the details of Mr. Lister's practice. And it puts into strong contrast two cases of excision of the elbow-joint, treated, one on Mr. Gamgee's principles—which are represented by dry, soft, and absorbing applications, and absolute rest, with drainage-tubes; the other on Mr. Lister's method, with attention to all the well-known details. Mr. Gamgee shows that in these two cases the man treated on his principles had a lower temperature throughout, and that the temperature reached a normal point sooner than in the other case; the pulse was also markedly slower. He emphasises still more one other difference—that the dry-rest man was so much more comfortable, slept so much better, and was so much more free from pain and swelling in the wound than his companion. The last distinction is, no doubt, only a part of the different states of the two men shown by the facts of temperature and circulation. Mr. Lister takes no notice of these cases, doubtless thinking that two cases will not suffice to show the difference between two methods. Doubtless, too, Mr. Lister thinks that no greater respect can be shown to his views than to practise them side by side with other modes of treatment. This is really what is wanted on a large scale; and it is a great pity that the solution of such a great question as the treatment of wounds cannot be hastened by systematic experiment on a large scale, under perfectly impartial observation. There can be no doubt that we are making huge wounds into joints and cavities and bones with an impunity which would be a surprise to the surgeons of former generations. There is some variety, too—perhaps less than appears—in the methods by which these wonderful results are obtained. Mr. Callender, Mr. Lister, Mr. Gamgee, and many others, have found different ways of procuring similar results; but an impartial observation on a large scale could scarcely fail to show that in all these methods some one or two points are essential.

Our medical societies should take the subject in hand, and raise the question into the region of pure science and art.

THE INDIAN MEDICAL SERVICE.

THE reorganisation of the Medical Service in India has been so long "under consideration" that we have despaired of a scheme for its improvement meeting any other fate than that of a docket and pigeon-hole in an official bureau. Now, however, that the Government of India have given their sanction to a general hospital system for the Afghan campaign, which places the troops, whether European or native, under the superintendence of one deputy surgeon-general of either service, we cannot but entertain a hope that the present dual system of medical administration, which can only be described as wholly unnecessary and outrageously extravagant, may very shortly be numbered with things of the past.

The finances of India are known to be at a very low ebb, and we feel sure that Lord Cranbrook will be unwilling to lose an opportunity of effecting a saving, and a very considerable one, in the Indian exchequer. The retrenchment will not only be in the number of medical officers, but very largely in the way of hospital establishments and equipment of all kinds. General hospitals for European and native troops will enable this economy on a very considerable scale to be carried out, and we hope ere long to see "the army of India," white and black, under one administrative medical head, officered by a united independent body of medical officers, with the entire hospital machinery brought into harmony, as far as climate and surroundings permit, with the service of the Queen at home and abroad. The Indian Medical Department would then become a purely civil service, retaining all its numerous important civil appointments, while those members of it who elect for a military life would be incorporated with the Royal service. These are merely the broad lines of a large and important scheme, but the principle is a sound one. There cannot be "two kings of Brentford"; divided responsibility means failure, and "failure" is a word that, as applied to army matters, should not exist.

THE OBSTETRICAL SOCIETY.

THE annual general meeting of the above Society was held on Wednesday, January 1st, when the following officers were elected for the ensuing year:—Honorary President: Dr. Arthur Farre. President: Dr. William S. Playfair. Vice-Presidents: Drs. James Braithwaite, Arthur W. Edis, John Baptiste Potter, George Roper, Robert James Wilson, Alfred Wiltshire. Treasurer: Dr. Henry Gervis. Honorary Secretaries: Drs. John Williams, and Clement Godson. Honorary Librarian: Dr. Galabin. Other Members of Council: Drs. R. S. Fancourt Barnes, Percy Boulton, Robert Cory, Frederick Henry Daly, James Matthews Duncan, William Carter Hoffmeister, William Hope, C. Dudley Kingsford, Thomas Savage, William Smiles, Thomas James Walker; Messrs. John Wright Baker, John S. Bartrum, George Eastes, Frederick Heudebourck Gervis, George Ernest Herman, and Alfred George Roper.

While the ballot was going on the bye-laws of the Society, as amended by the Council, were submitted to the Fellows for approval, and were unanimously adopted. The reports of the honorary treasurer and honorary librarian were read and passed. The former showed the financial position of the Society to be flourishing, the balance in hand being about fifty pounds more than that of the previous year. The report of the honorary librarian proved the continued usefulness of the library. The library itself has been enlarged by the addition of 457 volumes; of these 342 were obtained by purchase from the library of the late Dr. Blundell; some of these belonging to the sixteenth, but most of them to the seventeenth and eighteenth centuries. The rest were presented or obtained by purchase in the ordinary way. The library contains now nearly 3000 volumes. After the reading and adoption of the report, the President delivered his annual address.

A FATAL BOX ON THE EAR.

AN inquiry has just been concluded at Willingham, Cambridgeshire, into the circumstances leading to the death of a boy named Arthur Dines, about eight years of age. It appears the deceased was attending the board school at Willingham, and that on the afternoon of Nov. 27th he went to school quite well, but returned home between four and five, looking white and ill, and holding his head towards his left shoulder. He stated that he had been struck over the right ear by the monitor of his class at school. The next morning the poor boy was too ill to go to school. He was seen on different occasions by Mr. Buller, Mr. Ellis, and Mr. Grubb, surgeons in the neighbourhood, and they agreed the boy was suffering from cerebral disease, caused by a blow or fall. The patient gradually got worse, and eventually died on Dec. 7th, the last words he said being that the monitor "Hit me in school." This statement was confirmed at the inquest by two of his schoolfellows, with this discrepancy, that one stated the deceased was struck by the monitor four times with the flat side of a slate; the other that the monitor had only struck once, and then with his open hand. It was this discrepancy of evidence, coupled with the fact that the deceased had made no complaint to the master, that no doubt caused the jury to qualify their verdict with the statement that the evidence before them was insufficient to justify them in saying by whom the blow was administered, although there was no doubt that the boy died of disease of the brain, and that disease was accelerated by a blow. This is another illustration of the extreme danger attending the practice of inflicting punishment by boxing the ears, and, we may add, of any part of the head generally, since it is a favourite practice with some masters to rap their pupils' heads with the bent knuckles of the index and middle fingers. In sound, healthy lads, a box on the ears may not perhaps lead to fatal consequences, though there is always a risk of inducing deafness by rupturing the membrana tympani. In delicate boys, of strumous or tubercular tendency, fatal consequences may be easily induced, and a master, by giving way to a moment's irritation and an error of judgment, may forfeit a position gained by years of honourable toil, be imprisoned for manslaughter, and thus ruined for life.

SMALL-POX IN LONDON.

IT appears from the last weekly return of the Registrar-General that the Metropolitan Asylum Hospitals at Hampstead, Fulham, and Deptford contained 225 small-pox patients on Saturday last. In the middle of October the small-pox patients in these hospitals had declined to 91, since which they have steadily increased, and were on Saturday last more numerous than they have been since the middle of August. No less than 71 new cases were admitted during the week, against 61, 40, and 37 in the three preceding weeks. So many new cases have not been admitted in any week since the end of June. These figures forbid us to believe in the immediate termination of the present epidemic, so confidently spoken of by the Local Government Board a few months since. The fatal cases registered last week were 13, against 17 and 14 in the two preceding weeks, and it is noted that 12 of the fatal cases were of residents in South London, including 4 in Southwark, 4 in Greenwich and Deptford, and 2 in Camberwell. The fatal outbreak in

Deptford so soon after the opening of the Metropolitan Asylum Hospital in that neighbourhood calls for careful investigation, although the Chairman of the Metropolitan Asylums Board has arrived at the conclusion that it is mainly due to a wake that was held on the body of a child who had died from small-pox. The inefficient way in which the ambulance service has been carried out by the different local metropolitan sanitary authorities would probably be found, as at Hampstead, to have contributed to the spread of infection. The local sanitary authorities now appear anxious to remove this source of danger by shifting on to the managers of the Metropolitan Asylum District their responsibility with regard to the removal of patients suffering from small-pox and other infectious diseases. There is little doubt that the control of zymotic disease in London would be strengthened by this change.

THE PATHOLOGICAL SOCIETY.

AT the meeting of this Society on Tuesday next, the 7th inst., an important communication is anticipated from Dr. Buchanan and Mr. W. H. Power, on the Nature of certain Observed Relations between Diphtheria and Milk. The same meeting will be occupied with the election of new members of Council. Dr. Murchison's tenure of office having expired, Mr. Jonathan Hutchinson has been nominated for the presidential chair. The other officers proposed are:—Vice-presidents: Drs. George Harley, C. Murchison, James E. Pollock, Hermann Weber, Messrs. Bryant, Heath, T. W. Nunn, S. W. Sibley. Treasurer: Mr. Hulke. Hon. Secs.: Dr. Douglas Powell, Mr. Morrant Baker. Council: Drs. Barlow, Coupland, Tilbury Fox, Gowers, T. H. Green, Greenfield, Pearson Irvine, Ralfe, Frederick Taylor, John Williams, Kesteven, Messrs. R. J. Godlee, Warrington Haward, H. G. Howse, J. McCarthy, William McCormac, Henry Morris, A. T. Norton, W. Johnson Smith, W. W. Wagstaffe.

THE AFGHAN WAR: MEDICAL ARRANGEMENTS.

WE drew attention very recently to the medical arrangements in connexion with the campaign in Afghanistan, and are glad to find, from letters received by the last mail from India, that the system put forward by Surgeon-General Ker Innes, and adopted, though tardily, by the Government of India, is standing trial satisfactorily. The principles of that system are briefly these: First, to disencumber the fighting force at the front of their sick and wounded, with all impedimenta in the shape of superfluous hospital establishment, material, equipment, and transport; secondly, to provide immediate aid to the sick and wounded on the field, and their speedy removal to the divisional field or base hospitals, accomplishing this efficiently, and at the same time economising medical labour and transport as much as possible. There was only one way of doing this—to get rid of the old cumbersome regimental machinery, and to substitute in its place the simpler arrangements based on a "general hospital system." As regards the force operating in the Khyber Pass, we are able to state that, although the transition to the new system was only decided on very shortly before the army advanced, there has been no hitch of any importance in its operation. Surgeon-General Ker Innes, who was present at the capture of Ali Musjid, was able to telegraph immediately afterwards: "Arrangements for sick transport from the front very satisfactory; all doing well." The wounded, after being attended to on the field, were moved at once to Jumrood in dhoolies, and, after rest and refreshment, were conveyed in wheeled carriages to Peshawur, where the base hospital, completely equipped for 300 beds, under Surgeon-Major Fred. Moore, has been established. The movable field hospital for 200 beds was at first encamped at Jumrood, advancing with the force to Ali Musjid a day or two later. The great difficulty of carriage for the sick and wounded has so far been fairly met by the Commissariat, notwithstanding the many strains on it. Six elephants with howdahs, forty-three dhoolies, and some camels, left Peshawur on the 24th for the front, to further augment the hospital transport, and it was proposed to arrange for the conveyance of thirty dhoolies daily from the field to the base hospitals, these being intended for serious cases which would suffer from the jolting of an elephant or camel. Medical officers generally report that the new system is working well; its trial in a rough country like the Khyber will undoubtedly test it thoroughly.

ENTERIC FEVER IN THE MEDITERRANEAN FLEET.

WITH reference to an announcement in most of the journals, that enteric fever had made its appearance in our fleet now stationed off Artaki, we are enabled now to state that in the first week of September last one case occurred on board H.M.S. *Invincible*, in the person of a sailor, who had been to Constantinople on leave on Aug. 11th, and at Prinkipo on the 16th of the same month. This man died on Sept. 13th. During the first week in October, two more men who had been to Constantinople on leave were attacked, and another on the 23rd of the same month, the last having acted as nurse to the two former cases. On Nov. 7th, a house was taken for the sick at Artaki, and two of the cases were landed, and on the 16th of the same month these men were classed as convalescent, and were sent to Malta in H.M.S. *Agincourt*, the third man having resumed duty some few days afterwards. So that the outbreak seems to have been very mild, and due exclusively to importation from Constantinople.

SANITATION ETHICS AT SHEFFIELD.

THE *ne plus ultra* of self-opiniated local government appeared to have been reached at Sheffield last week, when the sanitary authority, laughing to scorn the advice and recommendations of the Local Government Board in the matter, elected a general practitioner to fill the post of medical officer of health to the town, with its 250,000 inhabitants, at the munificent salary of £300 a year. This is quite enough, when we take into consideration the amount of work that they will receive, or, indeed, can expect to receive, from their officer. Purposely abstaining from a study of any professional documents on the subject, it appears that the town contains (speaking roughly) more than a quarter of a million of souls, and that it is, as all our readers know, one of the largest centres in the world for cutlery and iron manufactures of all descriptions. There is probably no other town in England, perhaps in the world, more dependent upon special sanitary measures for the maintenance of health, and certainly no other place in which such measures, judiciously sketched out and applied, would, so to speak, pay, in keeping up the health of the people, decreasing the infant mortality and the poor-rates, and so creating much *κῦδος* for the man who organised and superintended the work. But, as the Local Government Board well know, such work must be continuous and persistent, and must proceed from the pen, tongue, and energies of a man of no mean ability in sanitary science. When Liverpool required a successor to Dr. Trench, we recorded a very decisive opinion as to the quality of man required for that post, and Sheffield should be provided with a man of inferior ability in no respect. But the action adopted by the Sheffield authorities must have the effect of holding up the office and the officer to scorn and contempt, and it is surprising to us that any member of the profession could for an instant be so oblivious of his position of general practitioner as to conceive it

possible for him to discharge the two varieties of work with benefit to the public or with satisfaction to himself. It is not necessary to take even a retrospective glance at the Registrar-General's Returns, but we may remind our readers that the death-rate lately has been very high in Sheffield (thirty-six per 1000 last week), and that during the last six months scarlet fever has been very prevalent. Which section will receive the more attention from the medical officer of health in this case, the private or the public? Who can tell?

YELLOW FEVER AND DIPHTHERIA IN THE UNITED STATES.

THE last published record of the Surgeon-General shows that yellow fever has almost disappeared from the Mississippi Valley. Four deaths were reported as having occurred in New Orleans during the week ending Dec. 10th; one at Port Gibson, Mississippi, with one new case; a death at Memphis; three new cases and one death at Mobile; and a new case (in the person of a returned refugee) at Meridian, Mississippi. The disease is said by the same authority to have appeared in the island of St. Thomas.

The Surgeon-General at Washington reports during the week ending Nov. 30th, 19 deaths from diphtheria in New York, 7 in Philadelphia (all children), 7 in Boston, 9 at Baltimore, 15 at Cleveland, and 2 at Milwaukee, out of a total of 55 definitely recorded cases. These quotations are taken from the Bulletins of the Public Health, compiled by Dr. Woodworth, in compliance with the provisions of the National Quarantine Act passed by Congress in the spring of the year just passed.

OVERCROWDING OF COTTAGES.

AT an inquest held by Mr. Grace, Coroner for West Gloucestershire, on the circumstances attending the death of an illegitimate child of Alice Smith, the following disgraceful facts transpired:—The house in which the prisoner lived consisted of only two rooms. In one of these rooms slept the poor woman, with two illegitimate children she had previously had, together with three grown-up brothers, aged respectively thirty, twenty-six, and twenty, while the father and mother and three children slept in the other. Can it be surprising, under these circumstances, that the poor creature should lose all sense of self-respect and decency, and that immorality and crime should be the result. The state of things, unfortunately, is so common throughout England that any words of indignation addressed to the clergyman of the parish who allowed such conditions to exist without uttering a vigorous protest, or to the landlord in permitting such an indiscriminate herding together of brothers, sisters, and illegitimate children, would be thrown away. It is now nearly thirty years since Kingsley made his vigorous protest in "Yeast" against the neglect of decency in the cottage arrangements of our agricultural labourers, "a labourer in Christian England where they cant of a Saviour's name"—a neglect tolerated by the clergy and fostered by the landlords. Since "Yeast" was written we have witnessed the introduction of the Common Lodging-house Act, for the benefit of the waifs and strays of our big cities; and, thanks to the persistent efforts of Mr. George Smith, the overcrowding of our canal population is now prevented by legislative interference. But the housing of the agricultural labourer seems, from evidence that is continually being brought before us, to be just as bad in the generality of parishes as when Kingsley wrote, and the moral responsibility the country clergy have incurred in not attempting to solve the great problem of decent accommodation for our labourers and their families is enormous, whilst they are greatly to blame for not having rebuked openly the greed, selfishness, and rapacity of their rich parishioners, who are responsible for the existing evils in their labourers' cottages. We suggest the case of Alice Smith and her illegitimate children for the earnest consideration of the country clergy at the next Church Congress.

THE RUSSIAN RED CROSS SOCIETY.

THE following return of receipts and expenditure from December, 1876, to the close of October, 1878, has been made by the Russian Red Cross Society. Contributions in subscriptions and donations, 5,818,423 roubles; from money-boxes (1878), 122,547 roubles; sums paid by the Minister of War—(1) for the food of patients, 920,000 roubles; (2) for assistance rendered to the medical department of the army, 2,538,090 roubles. Reimbursement by the Samara Committee of a sum advanced for the reconstruction of buildings destroyed by fire—namely, 60,692 roubles; surplus of money issued for use in the Yassy-Kischinew district, 120,000 roubles; interest upon Society's current account, 17,512 roubles; total receipts, 9,597,266 roubles. The expenditure during the same period amounted to 9,483,083 roubles, of which the distribution was as follows: To the delegate of the Yassy-Kischinew district, 1,414,060 roubles; to the delegate in Roumania, 1,935,412 roubles; to the delegate in Bulgaria, 1,277,850 roubles; to the depôts at St. Petersburg, Moscow, Kharkow, Kiev, and Brest-Litovsk, 1,163,236 roubles; for the preparation of various materials for the depôts, 251,333 roubles; for the maintenance of the general staff, 278,472 roubles; for the formation of the medical and sanitary staff, 55,955 roubles; subsidy to the Caucasus, 991,500 roubles; subsidy to the ports of the Black Sea, 339,986 roubles; food of patients, 898,939 roubles; organisation and maintenance of ambulances, 208,333 roubles; military and sanitary trains, and costs attending local movements of patients, 457,120 roubles; subsidy to sanitary trains provided by other nations, 153,120 roubles; care of convalescents, 28,510 roubles; provision of treatment for patients by mineral waters, 29,369 roubles; extraordinary expenses, 199,495 roubles; balance in hand, 1st (12th) November, 1878, 114,183 roubles.

Not less than 900 Red Cross sisters and sisters of charity served in the Russian military hospitals during the war, exclusive of numerous ladies and women nurses, who gave help under the supervision of the provincial Red Cross Committees. Five hundred of the sisters above-mentioned came from St. Petersburg, and of these 400 had received preliminary instruction in their duties in the hospitals of the capital, or otherwise, the organisation for this purpose being under the supervision of the Princess Eugenie Maximiliovna. An attempt is being made to provide permanent hospital occupation for many of the sisters returning from the seat of war, and to create a permanent nursing nucleus for the military hospitals in time of war.

THE CLINICAL SOCIETY.

AT the annual meeting on the 10th inst. the following gentlemen will be proposed for election to serve on the Council of the Clinical Society during the ensuing year. It will be seen that, Mr. Callender's term of office having expired, Dr. Headlam Greenhow has been nominated as the forthcoming President; Mr. Heath succeeding Dr. Greenhow in the office of Treasurer, which he has held since the formation of the Society. Dr. Cayley, the Medical Secretary, is to be replaced by Dr. Frederick Taylor. The following is the list:—President: Dr. Greenhow, F.R.S. Vice-Presidents: Drs. Bristowe, Wilson Fox, and S. O. Habershon; Messrs. R. Barwell, Brudenell Carter, and J. W. Hulke. Treasurer: Mr. Christopher Heath. Council: Drs. Julius Althaus, W. Cayley, R. Farquharson, T. H. Green, Grailly

Hewitt, Julius Pollock, J. E. Pollock, G. V. Poore, Jas. Grey Glover, L. W. Sedgwick, T. T. Whipham, and C. T. Williams; Messrs. E. Bellamy, W. B. Dalby, F. J. Gant, J. Langton, Wm. Mac Cormac, C. Macnamara, A. B. R. Myers, T. P. Pick. Hon. Secretaries: Dr. Fredk. Taylor; Mr. F. Howard Marsh.

THE FAMILIES OF HOSPITAL PATIENTS.

IT is impossible not to feel that Colonel Stuart Wortley has found a worthy object for charitable aid in the families of patients in hospitals. Recovery and convalescence are apt to be seriously retarded by anxiety for those at home; and when, in addition to this source of depression, the patient is haunted by the fear that, on being discharged from the hospital, he will be without shelter or the means of support for those dependent upon him, it is easy to see that the mental condition must be most inauspicious for the work of cure. Hospital physicians and surgeons will hail with sincere satisfaction the success of the movement which has been set on foot to form a fund from which help may be ministered to the sick and those dependent upon them. It will, of course, be necessary to protect the new organisation against possible abuses; but if intelligence as well as sympathy be enlisted in the effort, the service rendered to humanity will be considerable, and of great practical usefulness.

PALUDAL TORTICOLLIS.

M. JULES SIMON relates a case of torticollis due to miasmatic causes. The patient was a child of four years of age, a native of Bucharest, who had suffered from several attacks of intermittent fever. When brought under his notice it was suffering from spasmodic contractions of the sterno-mastoid, which commenced every day at about the same time, and lasted from four to five hours. The child was becoming pale, losing flesh and appetite. Fifty centigrammes of quinine were ordered to be taken every day. On the following day the attack was somewhat delayed, on the third the movements were very slight, and in six days they had entirely disappeared.

THE HOSPITALS OF ST. PETERSBURG.

WE learn from a recent return that St. Petersburg possesses thirty-five public hospitals. Of these, eleven are devoted to women, including three lying-in hospitals and one ophthalmic hospital; two are skin-disease hospitals; three hospitals for children; fourteen general hospitals; three hospitals for the insane; and one hospital devoted to men only. In addition, there are thirty-six private hospitals and dispensaries in the city; nine being establishments for treating diseases by electricity; four therapeutic establishments, so-called; one a hospital for diseases of the stomach and chest; three establishments for medical gymnastics; four hospitals for diseases of the ears; four for venereal and cutaneous affections; two lunatic asylums; two eye hospitals; one dental hospital; one for diseases of the nervous system; and one for cancer. There are three permanent posts in the city for medical service during the night.

THE COST OF SANITARY WORK.

IT appears that in the United States, if not in France, they manage these matters better than we do in England. The Report of the Secretary of the Treasury at Washington, U.S., on the state of the finances for the year 1878, referring to the Marine Hospital Service, records that 18,223 sick and disabled seamen were provided for during the year under consideration, a number exceeding by 1415 the largest ever quoted in any previous years. And, moreover, there was again a small but respectable surplus of receipts over expenditure amounting to nearly four and a half millions of dollars; and it is recited also that, at the same time, "the character of the relief furnished has steadily improved."

EPHEMERAL PARALYSIS OF BABIES.

M. JULES SIMON, at his clinique at the Hôpital des Enfants Malades, draws attention to an affection to which he gives the above name, pointing out that it is not to be confounded with infantile paralysis. It always has one of two causes: first, a powerful constriction, as in one case it was caused by a nurse seizing the child roughly by the arm; second, cold, as in one case in which it was caused by sitting on a wet lawn. It is accompanied by pains and hyperæsthesia. The prognosis is very good, recovery being both complete and rapid.

THE CHAIR OF NATURAL HISTORY AT ABERDEEN.

DR. EWART, who during the last few years has done such good work in the Anatomical and Pathological Museum of University College, has been appointed to the chair of Natural History at Aberdeen. This appointment will give great satisfaction to all acquainted with Dr. Ewart's rare powers as a teacher and original investigator.

THE annual report of the medical superintendent of the Broadmoor Criminal Lunatic Asylum, showing the general condition of the establishment in 1877, has reached us. There is nothing very noteworthy or demanding special comment in the returns. During the year 34 men and 9 women were admitted, and 12 men and 3 women died, leaving in the asylum upon the last day of the year 481 patients, of whom 380 were males. The general health of the inmates was satisfactory, and there was an entire absence of epidemic disease for the period. There were no serious accidents, no grave acts of violence, no suicides, nor any attempts at escape; while no form of mechanical restraint was used in any part of the asylum in 1877. The annual cost of patients per head was £53 13*s.* 7*d.*

THE guardians of the Hartley Wintney Union have caused a summons to be issued against General Napier, the governor of the Royal Military and Staff College at Sandhurst, for allowing sewage to run into the Blackwater river, thus polluting it, and so contravening the Rivers' Pollution Act. The existence of pollution seems to be tolerably clear, but the defendant's counsel urged that, being a servant of the Crown, he could not be summoned for such an offence. The *Reading Mercury* reports that the Judge manifested some surprise at such technical objections being raised, but took note of them and reserved his judgment.

A MOST unusual occurrence is recorded by the returns of the Registrar-General for the week ending Dec. 28th—namely, the preponderance in London of the number of deaths over the births, the former being 1900, and the latter 1762. The births were 433 below, and the deaths 85 above, the average numbers of the corresponding week of the last ten years. The mortality, as might be expected, derived a very large contingent from diseases of the respiratory organs, the deaths from which numbered 634.

A DEATH from tetanus, occasioned by the hypodermic injection of quinine, is reported from Iowa, U.S. The surgeon administered subcutaneously fifteen grains of bromide of quinine in dilute alcohol for the relief of an "intractable periodic neuralgia." The neuralgia was relieved, but the patient was seized with tetanus, and died in twenty-three hours after seizure.

THE profession will regret to learn that the medical officer of the Local Government Board, Dr. Seaton, has been suddenly plunged into great grief by the loss of his youngest son, James Clark Seaton, B.A. Oxon., killed on Christmas Day last by a fall from his horse at Tinnevelly, in Southern India. This young gentleman, who had given promise of a brilliant future, and had selected the Indian civil service for a career, had barely entered upon his duties when the lamentable accident occurred which proved fatal to him.

DR. ANDREW CLARK, who accompanied the Marquis and Marchioness of Lorne to Canada, proceeded from the Dominion to New York, where he was the guest of Professor Sayre. During his stay in New York Dr. Clark delivered a lecture on the Varieties of Phthisis to a large audience of medical men and students at the Bellevue Hospital Medical College.

THE two silver medals for modeling given by the Royal Academy of Arts, at the recent distribution of prizes to the art students at Burlington House, were awarded to Mr. Arthur G. Atkinson, the son of Dr. Atkinson, of Kew-green. The medals were given respectively for distinguished merit in modeling from life and for the restoration of an antique torso.

REPORT
OF
The Lancet Special Commission
ON THE
OVERCROWDING OF THE LONDON WORKHOUSES.

THE announcement has gone forth, with all the publicity that the Charity Organisation Society can give it, that at present there is no extra or special distress in London, no need for special subscriptions, and that nothing is wanted, except, of course, money and men, to strengthen the Society in question. This optimist view is, however, evidently conceived without any knowledge of a special phase of the question which is not only menacing to the poor themselves, but may endanger the general health of the metropolis. We at once recognised that the number of persons receiving parish relief has not, on the whole, increased; and, indeed, in some parishes we have found that official pauperism has been reduced, though we doubt if poverty and distress be any the less keen. But if the amount of out-door relief has been reduced, the number of in-door paupers who people our workhouses has sensibly increased, while the accommodation has not been improved to meet the extra strain. The overcrowding that results constitutes the danger to which we alluded.

The present condition of the parish of Marylebone will forcibly illustrate our meaning. The grand total of in- and out-door poor for the week ending Dec. 21st, 1878, amounted to 4725; whereas at the end of the same week of the previous year the total was 4919, thus showing a decrease, as compared with 1877, of 194. Yet the parish is at present in a most serious predicament, and it will require some special and energetic effort to prevent the continuance of a most unwholesome state of affairs. During the above-mentioned week the authorities had to give in-door relief to only 1900 persons in 1877; while this year the number increased to 2041. To render matters worse, it so happens that the workhouse is in a state of transition. It has been determined to build a separate infirmary, and for this purpose a site was secured at Notting-hill, where an asylum capable of holding six, perhaps eight, hundred patients, according to the number of storeys erected, will be constructed. In the meanwhile, and instead of waiting till this was completed, the parish authorities have allowed a portion of the actual workhouse to be pulled down so as to make room for new and extensive casual wards. Thus the in-door accommodation is less instead of greater; and, worse than all, a part of the infirmary has been sacrificed to make room for the able-bodied paupers. There is therefore overcrowding, not merely of the workhouse, but of the portion allotted to the sick. Efforts have been made to relieve this pressure, and, out of the number in receipt of in-door relief during the week ending Dec. 21st, 31 patients were farmed out by the Stepney asylum. There were also 24 paupers from Marylebone at the Poplar able-bodied workhouse. Now, however, both these institutions, which are a sort of safety-valve to prevent the overcrowding of the London workhouses, have closed their doors; Stepney returns its sick, Poplar will take no more outsiders.

The Marylebone Workhouse is certified to contain 1918 persons. On the day after Boxing-day there were no less than 2028 paupers sheltered by this institution; and this shows already 110 above the right number. But towards the end of January and in February the number of inmates, according to long precedent, will be greater that in December, and if to this increase we add the patients returned from Stepney and the able-bodied paupers who in ordinary times would be at Poplar, we shall have a degree of overcrowding which must be dangerous and unwholesome. At present no means seem to have been provided to meet this sudden call, and but three or four weeks remain for action. On the day of our visit the house was not so full, nevertheless the infirmary was overcrowded. The Shaftesbury ward, for instance, is certified to contain eight, but we found ten patients there, which represents overcrowding to the extent of twenty-five per cent., and the reduction of the cubic area per patient from 850 feet to 680! In another ward there were twenty instead of eighteen beds, but the medical officer had resisted any further addition here, as it is in this ward that the cases of erysipelas are kept. To relieve the infirmary several acute cases have been sent to the chronic and infirm wards, a course of action which can only be characterised as the lesser of two evils, particularly as the cubic area allowed in the latter wards is less than in the infirmary.

At Lambeth considerable relief has been experienced in consequence of the opening of a new and larger infirmary at Pleasant-place. While many sick were previously kept in the workhouse, there were none during 1878. The increase of in-door pauperism has now, however, completely filled the new and capacious infirmary. There is considerable danger that, if the prevalence of sickness increases, some of the patients will have to be taken in at the workhouse, as of old. If so, they will find but sorry accommodation. During the week ending Dec. 14th last, there were 779 inmates, though the certified number the workhouse should contain is only 763. This crowding is likely to increase, for, on the day of our visit, there were actually 807 persons in the workhouse—that is, 44 more paupers than there should be. If, in spite of this pressure, which will be greater still in February, room is to be found for the treatment of the acute cases of illness crowded out of the infirmary, we shall have here again a dangerous state of affairs.

The workhouse of St. Saviour's, Blackfriars-road, is in a somewhat similar position. This building is devoted exclusively to the care of the old and infirm, and chronic cases that do not require treatment. It is certified to hold 476 persons; fifteen beds having been added to the original number, when all the sick were removed to the Newington Asylum. On the day of our visit there were 470 persons in the workhouse, but these included 22 acute cases of illness, sent back from Newington, where there are no more beds vacant. Fifteen beds should now be removed from St. Saviour's, since the sick are returning, and there were, therefore, nine more persons than there should be in the workhouse, but on other days it has been far more crowded.

At St. George's, which is the workhouse for the able-bodied paupers of the district, the overcrowding has been very considerable. The absence of the clerk and the uncommunicativeness of the master prevented our getting the

exact figures. Still it is notorious that extra beds have been made up frequently of late, the master estimating their number roughly at about 20.

The Westminster Union, we are glad to state, shows no change, compared figures for inmates being 1071 in 1877 and 1085 in 1878.

Proceeding eastwards, we were naturally curious to ascertain why the Stepney Asylum had refused any further help to Marylebone in its sore distress. With the courteous and friendly assistance of Dr. D. Walshe, one of the resident medical officers, we obtained the following information. During the month of December there are generally between 480 to 500 patients. On the 26th December last there were 538. The asylum contains a maximum of 586 patients, and the male wards are actually quite full. Hence, on the 12th December last, 11 men had to be returned to Marylebone, though they were not then cured, and notice has been given that the women must soon be restored to their parish. These measures, though scarcely justified by the above figures, which show that 48 beds were still vacant, were rendered necessary by the reports of the relieving officers. The prospect of an augmentation in the number of local sick has led the authorities at Stepney to reserve all their resources for those who have a legal claim upon them. Indeed, at the Stepney Workhouse, which is immediately opposite the asylum, there has been already much overcrowding. It has been necessary to make up extra beds, but we regret to state that the master of the workhouse professed complete ignorance as to the number of paupers under his charge. We had imagined that it was the duty of such officials to facilitate inquiries instituted for the public benefit, and we are glad to acknowledge the courtesy with which we were everywhere received, and the most efficient assistance afforded us, by all the parish officials with the exception of the masters of St. George's and Stepney Workhouses.

Having satisfied ourselves that during the forthcoming pressure the workhouses must not count on the Stepney Asylum for assistance, we proceeded to Poplar to see if there was a brighter prospect for the able-bodied paupers. Here we found the figures to be as follows. On the 14th of December, 1877, there were 483 inmates, and on the same day, 1878, this number had increased to 683. The workhouse is certified to hold 768; this, for them, narrow margin of 85 beds, alarmed the local authorities, and made them fear that if, as threatened, the distress augmented, they would not have room for the poor of their own parish, particularly as a considerable proportion of the above beds were not available for able-bodied paupers, but are reserved for children &c. This is the more disastrous as the Poplar workhouse was not instituted for merely local purposes, but was intended to take the able-bodied paupers from twenty metropolitan unions. If all, or even only a few, of these unions are to be deprived, in moments of emergency, of the power of sending their able-bodied paupers, as usual to Poplar, then, indeed, the prospect is gloomy, and the necessity of providing some new and extensive accommodation most urgent.

At the Mile-end Workhouse we found a repetition of a condition of which we have given several examples. On the 20th of December, 1877, there were in all 507 inmates in the workhouse. On the same day last December the figure had risen to 597. The certified number the workhouse should hold is 592. They have no connexion with any other workhouse, no means of farming out any of their paupers, and we may consequently anticipate serious overcrowding in this establishment by next February.

Our final excursion was to St. George's-in-the-East, one of the parishes which have been the most rigorous in abolishing out-door relief. The results are certainly startling. Thus, during the year ending Michaelmas, 1871, no less than 8585 persons received out-door relief, whereas during the year ending Michaelmas, 1878, there were only 315 persons who succeeded in obtaining such relief at the hands of the inexorable guardians of this parish. The difference that this has made with regard to in-door pauperism is 3983 for the year ending Michaelmas, 1871, and 4413 for the same period in 1878. To return to the present overcrowding, we should state that on the 15th of December, 1877, there were 575 inmates, including about 90 sick, and at the same date last December there were 630, including about 200 acute cases of illness. The infirmary, which is next door, is certified to hold 279 patients; it had 283 in all at the above date in 1877, and 285 in 1878. While we were there, three new patients came in, and the cry is still "they come." The infirmary is not so well built as to be able to support overcrowding. On the 30th of December we found on the top flat alone 83 instead of 75, the maximum number of patients. It is, however, against the wards allotted to the sick in the workhouse itself that we must enter our most earnest protest. These would make very poor habitations, but they are totally unfit for the care of the sick, especially the women's wards. We could find no trace of ventilation. There were windows, but on one side only, and these were carefully closed. The stench was perfectly appalling. On the Continent something similar might occasionally be found, but in England, and in the metropolis, we had hoped that such barbarism was extinct. We need scarcely say that these wards are not under the control of the medical officer. This gentleman has failed to obtain even a classification of the sick, and the authorities will not supply such a trifle as a movable screen. On each landing, just outside the doors of the two wards, there are fourteen fixed iron hand-basins, each with a pipe communicating directly with the sewer, and ready to discharge a platoon fire of sewer gas into the patients' wards. On the other landing, between each floor, there are two closets and two sinks, and the drains here seem to be very imperfect. We received many complaints of leakage through the walls, accompanied with abominable smells. The chief, sometimes we should imagine the only, ventilation of the sick wards is derived from the doors that give access to the sewer-impregnated staircase. Indeed, care has been taken to drill some holes through the bottom of these doors, so that, even when they are closed, the patients have the chance of breathing sewer-gas. Such is the place into which the guardians of St. George's-in-the-East crowd their sick poor. We are surprised that the Local Government Board has not yet interfered in the matter, and insisted that proper and qualified medical authorities should govern these wards, particularly as they now contain, in round numbers, no less than 200 patients. Fortunately the guardians are about to buy a neighbouring structure, where they will be able to lodge some sixty able-bodied paupers, and perhaps then the sick wards of the workhouse may be joined to the neighbouring asylum. This should be done without a moment's loss of time; but even if it is done it will be no easy task to render such wards fit for hospital purposes.

From all the above facts it will be seen that under the present system of restricting out-door relief there is not sufficient in-door accommodation for the pauperism of the metropolis during the trying period of December, the end of January, and February. Overcrowding must ensue unless more wards are built by each parish, or by a union of parishes. At the same time there is no distinct connexion traceable between the present increase of in-door pauperism and the commercial depression from which the country is suffering. If this were so the case would be infinitely worse, and we must also provide against this possibility. As overcrowding must compromise the health of the paupers, may occasion the outburst of an epidemic which in all probability would not be confined within the workhouse walls, we conclude, as we began, that both paupers and public are exposed to risks that may be more serious than generally imagined.

Correspondence.

"Audi alteram partem."

MR. SYME'S TREATMENT OF INCISED WOUNDS.

To the Editor of THE LANCET.

SIR,—In a clinical lecture "On Wound Treatment," published in your issue of December 28th, Mr. Gamgee, speaking of Liston and Syme, says, "They thought water-dressing of recent wounds perfection."

I feel it due to Mr. Syme's memory to remind your readers that such was not his more matured opinion. Of the many things which I found to admire when I first saw Mr. Syme's practice in 1853, none struck me more than his treatment of recent incised wounds. Having approximated the cutaneous margins with interrupted sutures at con-

siderable intervals, so as to allow opportunity for the escape of blood and serum between them, he kept the deeper parts of the cut surfaces in apposition by means of pads of dry lint applied to the body of each flap, but leaving the edges free, and kept in position by a gently compressing bandage, the first dressing being allowed to remain undisturbed for four days. I well remember, what Mr. Gamgee has perhaps forgotten, holding him as if spell-bound outside the gate of the infirmary one evening during my house-surgeoncy in Edinburgh, as I related to him the immeasurably superior results obtained by this method, as compared with those given by water-dressing.

The advice to treat "all incised wounds" by keeping them "constantly covered with cold wet cloths," contained in the 1842 edition of Mr. Syme's Principles, was omitted in the next edition of 1856; and in that of 1863 we find metallic sutures recommended, by means of which his plan of dry dressing on the principle above described gave still better results. Nevertheless, and the fact has always seemed to me a striking illustration both of his clear-sightedness and of his liberality of mind, he gave in his cordial adhesion at a later period to the antiseptic principle.

The abandonment of the long septic ligatures and the use of the drainage-tube have undoubtedly placed the method of dry and infrequent dressing in a yet more favourable position than it before occupied, and its advantages become still more conspicuous when it can be combined with complete immobilisation, as advocated by Mr. Gamgee. But whether it can yield average results at all comparable with those of strict antiseptic treatment, and whether it causes in the long run less pain to the patient or less trouble to the surgeon, are very different questions, which I must not now occupy your space by discussing.

I am, Sir, yours, &c.,

Park-crescent, Dec. 21st, 1878. JOSEPH LISTER.

THE LIGATURE IN CASES OF ANEURISM.

To the Editor of THE LANCET.

SIR,—I do not at all wish to impugn your report of the proceedings at the Medico-Chirurgical Society on the 10th inst. I believe it contains very much of the spirit of what was said, still not all of that spirit, and I would ask you to let me supplement certain points to which I could wish that your columns had given greater prominence.

Your reporter hardly notices the kind and complimentary manner in which my interlocutors recognised the fact that my three cases of double distal ligature for innominate aneurism are the only successful ones on record. This would be, perhaps, of comparatively little moment, did it not involve matter of very great importance—viz., that I attribute this success to the mode of deligation with a tie so loose as not to cut through the two inner coats of the vessel—a procedure which could only be adopted with a ligature that does not afterwards come away. Nevertheless, catgut is, as I stated, an unreliable substance. I added that I have devised, not that "I was engaged in devising," a material which will, I fully believe, supersede all other ligatures for tying arteries in their continuity, inasmuch as it does not cut the coats of the vessel, becomes quickly organised, and is secure in the knot. I have tested this material in the way one usually tests new procedures, and by tying vessels divided in operation; in all these it has acted perfectly.

I cannot but think that if greater prominence had been given to these points, some of my professional colleagues and friends would ere this have sent me into hospital cases of aneurism amenable to treatment by ligature, with which to finish the experiences required before introducing the matter publicly to the profession.

I remain, Sir, your obedient servant,

RICHARD BARWELL.

George-street, Hanover-square, Dec. 21st, 1878.

DR. WILLIAM ALEXANDER, of Halifax, has been placed on the Commission of the Peace for the West Riding of Yorkshire.—Mr. John D. Harries, M.R.C.S., was sworn in a Justice of the Peace for the borough of Shrewsbury, on the 1st inst.

MANCHESTER.

(From our own Correspondent.)

THE Manchester Medical Society recently devoted two evenings to a discussion upon hysteria as developed at the Salpétrière, of a lively and interesting, if of a somewhat barren nature. The debate was opened by Dr. Wm. Roberts, who gave the keynote to the general tone of the discussion in maintaining as his opinion that while the phenomena in question were without doubt accurately and carefully described, they were at the same time the result of unconscious tuition; that, in a word, if the same system were pursued with many of our own hysterical cases as at the Salpétrière, we should by and by obtain the same results, and develop a true major hysteria in England as had been done in France. During the debate many very elaborate and attractive theories of the pathology of hysteria were advanced, some having an anatomical and others an anatomico-physiological basis, and in which molecular physics were largely called upon. Some speakers announced with a great flourish of words that the disease essentially consisted in an inhibitory action of the emotional centres, while others maintained that while the discharging lesion took place through these or closely allied ganglia, the diseased action might arise peripherally. The view that hysteria, like anger or love, however it might depend upon a peculiar condition of cerebral matter, was in its nature not likely to have material records of its passage across the nervous path, and that, indeed, the real pathology of hysteria was beyond the confines of human knowledge, involving as it did the mystery of the nexus of mind and matter, was also advanced, but did not seem to gain general approval; the more general conviction being that something would, Micawber-like, turn up to throw a light on this mysterious disease. Dr. Roberts, in closing the debate, took occasion to remark that he did not think any of the ingenious theories advocated really cleared up the difficulty, or sufficed to explain all the phenomena—that, far from always pointing to inhibition, hysteria often, as in the case of fasting girls, was characterised by a sort of tetany of the will, and that behind the peculiar hysterical sign there was still hysteria. He said that, though he had no great fancy for theorising as to its pathology, a kind of scheme had presented itself to his mind during a recent visit to Wales, which he thought was to a certain extent suggestive of the origin of the symptoms. Watching the sheep brought down the hills, he observed how shepherds and dogs and sheep all worked together, and how a mistake sometimes occurred, now through the carelessness of the shepherds, at other times through the fault of the dogs, at others through the stubbornness or stupidity of the sheep, which might in this way be said to severally represent the higher centres of the mind, the lower ganglia, and the separate organs and muscles &c. of the body. Besides a general expression of opinion that the remarkable phenomena exhibited by patients in the Salpétrière, were all the result of attention being paid to their symptoms, which were by this means fed and accentuated, there was also a plainly expressed conviction that such exhibitions were eminently improper in a large hospital; which last may be regarded as the practical outcome from the debate.

At our great charities efforts are generally made to put on a cheerful face at Christmas time, and though at the infirmary the usual ball, which the nurses so much enjoy, and to which they look forward so long, was this year vetoed by the board, a theatrical representation was given two nights in the week, in one of the large wards, which it is to be hoped in some measure made up for the loss of the ball. At the Children's Hospital there was a large gathering on Saturday, the 28th, to distribute the fruit of several Christmas trees to the little inmates. During the day, Dr. Borchardt, the true "genius loci," though no longer officially connected with the institution, was presented with a bust of himself, which it is arranged shall remain in the hospital.

The Council of Owens College have advertised for a lecturer on Medical Jurisprudence, which has been hitherto merged in the work of the lecturers on Materia Medica and Hygiene. Dr. Ashby and Mr. C. J. Cullingworth have already announced their intention of offering themselves as candidates for the office.

PARIS.

(From our own Correspondent.)

FURTHER changes have taken place in the hospitals in Paris. Professor Ball goes to the Temporaire, with MM. Damaschino, Ferrand, and Legroux; MM. Cornil, Hayem, Rigal, and Perier move to St. Antoine; MM. Graucher, Dieulafoy, and Straus are appointed to the new hospital of Menilmontant; MM. Rendu and Nicaise to Lourcine; M. Aoudhui to Ivry, and M. Lionville to Larochefoucauld. M. Panas leaves the Lariboisière, where he is replaced by M. Duplay, and takes the vacant service at the Hôtel Dieu. M. Le Dentu succeeds the last-named surgeon at St. Louis.

M. Paul Bert, the newly-elected life president of the Société de Biologie, took his seat on Dec. 21st, and pronounced the panegyric of his predecessor, Claude Bernard. An unusual number of members had assembled for the occasion.

The experiments on grave hysteria at the Salpétrière still continue, and the last number of the *Progrès Médical* devotes an article to the description of the "Compresseur des Ovaires"—an apparatus recently invented for arresting, or preventing, an hysterical crisis. In the same journal Dr. Romain Vigoureux, "a distinguished metallo-therapist," defends the new method from the attacks recently made on it by Dr. Carpenter and others in an English contemporary. He asks whether it would not be more philosophical, when the reality of a fact is doubted, to verify it experimentally instead of theorising on its possibility. He reminds Dr. Carpenter that the Royal Society once devoted several sittings to discuss whether a dead fish took more room in a bowl of water than a living one of the same size, and it was only after a warm controversy that one of the members thought of submitting the question to the balance. "As often," says Dr. Vigoureux, "as an observer criticises experiments without taking the trouble to repeat them, without knowledge of the original acconnt of them ..... and has for his sole criterion the persuasion that he alone is possessor of the commonest ideas on the subject, this author—even were he Dr. Carpenter—will write articles beside the question, such as that which we are now examining."

The *Paris Médical* takes Professor Charcot to task for an eulogistic article published in the *Figaro*, and in which the celebrated physician is represented as the renovator of modern science. A series of articles, tending to the same conclusion, has lately appeared in the *France*, in the *Petit Journal*, in the *Charivari*, and various political and humoristic papers. The rather unenviable celebrity which the learned professor has thereby acquired, much to his annoyance and entirely against his desire, may perhaps serve to explain his unexpected failure as a candidate for the Institut (Academy of Sciences), where, at the last election, he only polled three votes out of 59, Professor Marey being the successful candidate. The *Paris Médical* goes on to say that medical men and students are unable to obtain entrance to the lectures, owing to the throng of the general public, "whilst shopmen and clerks are present at what they call the Salpétrière *tableaux vivants*. We know," says the *Paris Médical*, "an *employé* who amuses himself every Sunday at this hospital. All last week the salesmen at the Bon Marché (a large drapery establishment) were joking about the women they had seen the previous Sunday. It is deeply to be regretted that these exhibitions (*sic*) are not reserved exclusively for the profession."

In its last sitting, the Conseil Général of the Seine discussed the question of out-door medical relief in Paris. It was pointed out that the doctors of the Bureau de Bienfaisance could not be expected to devote much attention to their duties at the present rate of remuneration. The parsimonious policy adopted by the authorities in this respect also led them to dispense with the services of a *pharmacien*, in consequence of which the preparation and distribution of medicines were entrusted to the sisters of mercy, who, in addition to occasionally poisoning the sick by their mistakes, used the power with which they are invested, of distributing certain provisions, as a means of religious proselytism. The Préfet of the Seine did not see any reason for interference with the present arrangements.

Dr. Brown-Séquard's lectures at the Collége de France attract much attention. His opening address, published in the *Gazette Hebdomadaire*, December 20th, gives the main points of his teaching, but those who have studied his writings in THE LANCET, especially for the last three years, will find themselves sufficiently acquainted with the new doctrines.

The French Government, persevering in their laudable efforts to extend the benefit of scientific education over a much larger surface than it has hitherto occupied, has created a new faculty of medicine at Toulouse, and a faculty of law at Montpellier. The object appears to be to establish universities in all the leading towns of France. It may be questioned whether the well-intentioned minister has not slightly overshot the mark. To found universities is no doubt an excellent thing, but then they should be decently provided with students. Now, to speak of medicine alone, the South of France will possess four faculties—Montpellier, Lyons, Bordeaux, and Toulouse. It may confidently be predicted that Marseilles, with its flourishing medical school, and its population of 350,000 souls, will also claim the privilege of conferring degrees; and it may then be doubted whether the five southern faculties will attract a sufficient number of pupils to infuse the necessary vitality into their veins. It is, however, evident that the present Government are determined upon spending a much larger amount of money upon public education than has ever been devoted to that purpose, and this not merely by multiplying the scientific centres, but also by raising the salaries of scientific men. The professors of medicine who formerly received about £500 a year now get £600, and similar changes are taking place throughout the University. If it be true that scientific work, like any other, is better done when better paid, the additional expense incurred by the State will be no doubt fruitful of good results for the future.

It is stated, on the authority of one of the members of the Conseil d'Administration of the Assistance Publique, that a new grant of 100,000 francs had been accorded for relief to sick persons treated at their homes, in addition to the sum that is annually allotted for that purpose. This measure has been taken in order to keep a certain number of patients suffering from tuberculosis away from the general hospitals, whose wards are too often overcrowded with chronic cases. It is also the intention of the Administration to establish sanatoria in the south of France at the different winter stations, in order to allow those patients who are suffering from chronic pulmonary affections to winter in a more temperate climate.

It is probable that the question of the chair of Mental Pathology will soon find a solution by the establishment of a clinical service at Ste. Anne, which will occupy for the time being one of the old pavilions, whilst a new one will be built. The patients who will enter the service will be specially chosen with a view to clinical instruction.

At the recent banquet to the physicians at the hospitals it was unanimously decided that a petition should be sent to the Director-General of the Assistance Publique asking that the Hôpital Temporaire should in future bear the name of Hôpital Laennec, in honour of the illustrious discoverer of auscultation.

It is with feelings of profound regret that the members of the profession in France received the news of the death of Dr. Bazin, the celebrated dermatologist of St. Louis Hospital, whose clinical teaching was attended with such great success. Dr. Bazin may be looked upon as the founder of the present school of dermatology, which is so ably represented at St. Louis. He was the author of numerous important works, amongst which we may cite his "Traité des Maladies de la Peau." The faculty of Nancy has also sustained a heavy loss in the death of Professor Grandjean, professor of therapeutics.

A recent communication by Dr. Lannelongue upon Osteo-myelitis furnished the occasion of an interesting discussion at the Academy of Medicine. The disease, which was first described by Chassaignac under the name of Osteo-myelitis, has given rise since to a great diversity of opinion. It has been described under the name of diffused phlegmonous periostitis, osteo-myelitis of adolescence, and various other denominations, according as the authors were of opinion that the disease had its origin in the periosteum, the osseous tissue, or the medulla. The members that took part in the discussion were of opinion that the disease might originate indistinctly in the three substances. The treatment proposed by Dr. Lannelongue was the trephining of the bone.

In the week ending December 24th there were 14 cases of

typhoid, 4 of small-pox, 38 of bronchitis, 22 of croup, and 65 of pneumonia. The chronic affections, as usual, furnished a large contingent, numbering 539, out of which 165 were due to phthisis.

At the last meeting of the Société de Biologie, M. Javal made a very interesting communication on hygiene of the eyes, in which he explained in what manner protracted reading was bad for those organs. The eyes, he said, were compelled to accommodate themselves with too great rapidity to a series of successive impressions, requiring a considerable number of contractions of the ciliary muscle.

On Saturday last the large amphitheatre of the Assistance Publique was the scene of a ceremony which every year, at the same date, excites great interest amongst the students of medicine of Paris. After the hard contests of competing for the much desired post of house-physician or house-surgeon to the Paris hospitals, or for the silver and gold medals which are every year given by the general administration of the hospitals, the students are convened at the above-mentioned date to hear the official proclamation of the victor's names, and to receive the laurels which they won. The post of house-surgeon to the Paris hospitals is the keystone to the professional future of all those at least who mean to compete later on for the post of surgeon or physician to the Paris hospitals. All the hospitals and hospices of Paris being under one sole government and administration, there is only one *concours*, or public competition, which occurs but once a year, for the nomination to the vacancies which have occurred during the year in all of the Paris hospitals. The number of nominations varies annually from thirty to forty, and the competitors are all the *externes*, or clinical clerks of the hospitals. It is a very arduous ordeal indeed, and the students prepare for it for at least two or three years, and go through special training and "getting up." The contest for the gold medals is a still closer and "hotter" one, as it takes place amongst those who have already gained the post of house-physician.

The ceremony of Saturday last took place at one o'clock, under the Presidency of M. Michel Moring, the Director-General of the Assistance Publique. Around him were to be noticed all the high officials of the Administration, and a great many Paris hospital physicians and surgeons, especially those who had been members of the various juries. M. Moring made a good speech, very much to the point, to thank the retiring *internes* for their valuable services, and welcome the new ones. The list of *internes* and *externes* was then proclaimed and the medals given in the following order:—Gold, M. Letrille; silver, M. Barth; honourable mentions, MM. Dreyfus and De Boyer. Second division: Gold, M. Arnozan; accessit, M. Merklen; honourable mentions, MM. Gauché and Vimont.

This is the time of the year when the various academies and societies of Paris vote for the renewal of their boards, and perhaps it may be of interest to mention the changes that have occurred in two or three of the most important. At the Academy of Medicine, Professor Richet, the Vice-President, succeeds by right the present President; M. Henri Roger has been elected Vice-President, to take the chair next year; and M. J. Bergeron succeeds Dr. Roger as annual secretary. At the Société de Chirurgie, M. Tarnier, head-surgeon to the Lying-in Hospital, has been elected President; M. Tillaux, Vice-President; and MM. Lannelongue and Polaillon are appointed secretaries. At the Medical Society of the Paris Hospitals, M. Herving becomes President; M. Hillairet, Vice-President; MM. Martineau and Duguet, secretaries; and M. Dujardin-Baumetz remains treasurer.

I see this morning in the journals that at length the official decree has been published appointing two new chairs at the School of Medicine, one for Diseases of Children, the other for Ophthalmology. The much-debated question of introducing "specialties" and special chairs at the Faculty is thus officially and definitively settled. There is yet a chair to be devoted, that of Syphilography. You are aware that it is the Professors of the School who vote amongst themselves for the nomination of any new professor, and their list is presented for approval to the Minister of Public Education. Judging from what I know of the present condition of the School "atmosphere," I think I can safely prognosticate that Dr. Parrot will be nominated to the chair for Children, and Dr. Trélat to that of Ophthalmology. As these two gentlemen are already Professors at the School, this will necessitate two fresh elections for supplying the vacancies thus created.

Obituary.

THOMAS WALTER EVANS, M.R.C.S., L.S.A.

MR. EVANS died on Dec. 15th, 1878, at the early age of thirty-one, in the township of Everton, Liverpool, after ten years' hard work in general practice in a densely populated district, inhabited largely by his fellow-countrymen, who compose the large Welsh colony of this seaport. He was the eldest son of the Rev. D. Silvan Evans, B.D., Rector of Llanwrin, and Professor of Celtic in the University College of Wales. His education commenced at Ruthin Grammar School, and ended at Guy's Hospital. The practice he had acquired was a lucrative one, but it is to be feared that it cost him his life. Repeated attacks of dyspepsia, with the accompanying bodily fatigue and mental excitement, never thoroughly recovered from, culminated in an attack of typhoid, which proved fatal at the end of the fourth week, owing to pulmonary complication.

HENRY J. TYRRELL, F.R.C.S.I., M.R.I.A.

WE regret to announce the death of this gentleman, which occurred at his residence, Merrion-square, Dublin, at the comparatively early age of forty-five years. The deceased suffered a good deal from gout, which, we understand, was accompanied with renal disease. Mr. Tyrrell was Professor of Surgery in the Catholic University, and Surgeon to the Mater Misericordiæ Hospital, being previously attached to Jervis-street Hospital. He was a member of several medical and scientific societies, including the Dublin Pathological, Surgical Society of Ireland, and Royal Irish Academy; while among his contributions to medical literature may be mentioned papers on "Tetanus," "Trephining the Spine," and "Fracture of the Patella."

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Dec. 26th:—

Greensill, Joseph Moore, Great Whitley.
Jewell, Charles Coleman, University College Hospital.
Parry, Robert, Festiniog, Carnarvon.
Read, Edward Juskip, Stoke, near Devonport.
Rusher, James Benjamin, Pershore, Worcestershire.
Woolstencroft, Joseph, Northwich.

The following gentlemen on the same day passed the Primary Professional Examination:—

Samuel Barjona Fairley, Birmingham; Francis Jas. Grindon, Charing-cross Hospital.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At examinations held on Dec. 9th and following days the undermentioned gentlemen obtained the licence in Surgery of the College:—

William Theodore Atkinson, James Robert Barton, Henry Lewis Battersby, John Cashin, Patrick Francis Coglan, Daniel Corbett, Peter A. D'Alton, James Joseph Davis, Michael Donnelly, John Alexander Dockeray, Albert J. Duffey, Thomas Fitzpatrick, Samuel Flood, Armitage Forbes, Simon K. Furney, James Joseph Harding, Richard C. Laffan, Edward L. Ledwich, Henry Lentaigne, Henry Love, John William Macnamara, Michael Joseph M'Coy, William Joseph Magee, Alfred Mason, John Mason, James M'Loughlin, George Mark P. Murray, Charles G. O'Connor, Walter Stephen Palmer, Charles Parke, Thomas Heazle Parke, William Johnson Patton, Henry Pentland, Bernard Reddy, Denis Daniel Redmond, Edward James George Rothe, Thomas Sheedy, Henry Wm. Smith, Henry George Stokes, Thomas Joseph Tobin, Charles Vokes, H. L. E. White.

THERE were 116 deaths from small-pox registered in Dublin during the last quarter of 1878.

ADELAIDE HOSPITAL, DUBLIN.—On last Tuesday, at this institution, Lord James Butler presented to the two resident pupils, Messrs. Wallace Beatty and Alexander Silcock, on the expiration of their term of office, a gold locket each, the gift of the patients, for the great kindness, attention, and care bestowed upon them in their sickness and pain. Lord Butler congratulated the recipients upon their early success in the noble profession which they had entered, and hoped they would long be spared to continue in well doing.

DR. HARCOURT MCLEOD BUSFIELD has died from accidentally drinking aconite liniment in mistake for sherry.

THE Ipswich guardians have increased the salary of Dr. W. A. Elliston, the medical officer to the Union Workhouse, from £110 to £125 per annum.

AT a recent meeting of the Kilbeggan Dispensary Committee a resolution was adopted, calling upon the medical officer of the district to resign on or before the 10th instant, in consequence of an inquiry recently held by order of the Local Government Board for Ireland.

PRESENTATION.—The committee of visitors of the Gloucester County Asylum have presented Dr. G. Hunter Mackenzie, and Mr. W. H. Packer, the assistant medical officers, with £100 and £30 respectively, in token of their satisfaction with the manner in which those gentlemen conducted the asylum during a period of eight months. Dr. Mackenzie has also received from the officers, attendants, and servants, a handsome silver tankard, with an illuminated address, expressive of their respect, esteem, and appreciation; and Mr. Packer has received a time-piece and writing desk.

HEALTH OF DUBLIN.—During the week ending 21st December, the deaths registered exceeded the births by 64. This was principally due to the excessive mortality from affections of the respiratory organs, the deaths from these diseases being more than double the average number. 15 deaths took place from small-pox, being 7 more than in the preceding week. It is stated that the Sanitary Committee of the Corporation of Dublin intend to increase their staff, and expend large sums for the sewerage of the city during the present year, in the hope of reducing the high death-rate.

Medical Appointments.

ASBURY, A., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Teignmouth District of the Newton Abbot Union, vice Creswell, who was appointed, but declined.

BUCKELL, F., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 1 District of the Romsey Union, vice Sainsbury, resigned.

COLLETT, R. W., M.R.C.S.E., L.R.C.P.Ed., has been appointed Resident Medical Officer to the Ramsgate and St. Lawrence Royal Dispensary and the Seamen's Infirmary, vice Newman, resigned.

DAY, E. J., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Eastern Sub-district of the Dorchester Rural Sanitary District, at £50 for one year.

DE BRENT, M. J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Reformatory School Ship *Cornwall*, off Purfleet.

ELLIS, T. S., M.R.C.S.E., has been appointed a Consulting Surgeon to the Gloucester General Infirmary.

FIRTH, C., M.B., F.R.C.S.E., has been appointed a Surgeon to the Jenny Lind Infirmary for Sick Children, Norwich, vice Robinson, resigned.

GRAVES, R. W., F.R.C.S.E., has been appointed a Consulting Surgeon to the Gloucester General Infirmary.

HEAP, C. S., L.K.Q.C.P.I. & L.M., M.R.C.S.E., has been appointed Medical Officer to the Reading Amalgamated Friendly Societies' Medical Association, at £180 per annum, Midwifery and Vaccination Fees, and unfurnished house.

HORDEN, J. O., M.B., C.M., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed a Resident Medical Officer to the York Dispensary, vice Procter, resigned.

JONES, D. J., C.M., M.R.C.S.E., has been appointed Junior Assistant Medical Officer to the Gloucestershire Lunatic Asylum, near Gloucester.

KEBBELL, W., L.R.C.P.I., M.R.C.S.E., has been appointed Senior Assistant Medical Officer to the Gloucestershire Lunatic Asylum, near Gloucester.

MACAULIFFE, A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, &c., for the Kilgarvan Dispensary District of the Kenmare Union, at £100 per annum and fees, and £20 per annum as Medical Officer of Health, vice Taylor, resigned.

MACMILLAN, D., M.B., C.M., has been appointed a Parochial Medical Officer, Public Vaccinator, and Medical Officer of Health for Kilcalmonell and Kilberry, Knapdale South, and Saddell and Skipness, Argyllshire, vice Campbell, deceased.

MACNAUGHTON, W. A., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the South District of the Parish of Great Yarmouth, vice Lettis, resigned.

PRIOR, E. T., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Ashley District of the Drayton Union, Salop, vice Lloyd, whose appointment has expired.

RENDALL, W., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Western Sub-district of the Dorchester Rural Sanitary District, at £50 for one year.

SANDFORD, F. J., M.D., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Drayton Rural Sanitary District, Salop, at £40 for one year.

SWANN, A., M.D., has been appointed Resident House-Surgeon to the Oldham Infirmary

TANDY, B. L., L.R.C.P.Ed., L.R.C.S.I., has been reappointed Medical Officer and Public Vaccinator for the No. 4 District of the Risbridge Union, Suffolk.

THURNAM, F. W., M.B., C.M., has been appointed Assistant Medical Officer to the Metropolitan Asylum District Asylum for Imbeciles, Caterham, Surrey.

TIRARD, N. I. C., M.B., M.R.C.S.E., has been appointed Lecturer on Practical Medicine at St. Augustine's College, Canterbury, vice Lechee, resigned.

TREVES, F., F.R.C.S.E. &c., has been appointed Surgical Registrar to the London Hospital, vice Parker, resigned.

WARNER, F., M.D., M.R.C.P.L., has been reappointed Medical Registrar to the London Hospital.

WHITE, E. W., M.R.C.S., has been appointed House-Surgeon to the Birmingham and Midland Eye Hospital, vice Hex, resigned.

WHITEHEAD, A., M.R.C.S.E., has been appointed an Acting Medical Officer to the West Birmingham Provident Dispensary.

YATES, G., L.S.A.L., has been appointed an Acting Medical Officer to the West Birmingham Provident Dispensary.

Births, Marriages, and Deaths.

BIRTHS.

CURTIS.—On the 15th ult., at Alton, Hants, the wife of Arthur Curtis, L.R.C.P.L., of a son.

GAMGEE.—On the 30th ult., at Fallowfield, Manchester, the wife of Arthur Gamgee, M.D., of a daughter.

GRELLET.—On the 29th ult., at Hitchin, Herts, the wife of Charles John Grellet, M.R.C.S.E., of a son.

MAY.—On the 17th ult., at Tottenham, the wife of Edward Hooper May, M.D., of a daughter.

TWORT.—On the 20th ult., at Camberley, the wife of William Henry Twort, M.R.C.S.E., of a son.

MARRIAGES.

KNAPTON—FORSTER.—On the 21st ult., at St. James's Church, Shirley, Hants, George Knapton, to Mary Annie, widow of Matthew Forster, Esq., C.E., J.P.

STAMP—BENNETT.—On the 26th ult., at St. James-the-Less, Plymouth, by the Rev. Canon Knowling, M.A., Vicar of Wellington, Somerset, assisted by the Revs. F. Gurney, M.A. (the Vicar) and J. Bliss, M.A., William D. Stamp, M.R.C.S. & L.R.C.P., of Ridgeway House, Plympton St. Mary, to Anna Mary Louise, eldest daughter of Lieut.-Col. Worthy Bennett, R.M.L.I., Plymouth.

DEATHS.

ARCHDALL.—On the 21st October, at Murrumburrah, New South Wales, Thomas Gray Archdall, L.R.C.P.Ed., aged 35.

BARRON.—On the 25th ult., suddenly, at St. John's, Woking, Edward Enfield Barron, Esq., M.D. Lond., late of St. Thomas's-street, Southwark, aged 67.

BEST.—At Stanningley, Yorkshire, Frederick Warningham Best, L.F.P.S.G., aged 54.

BLAKE.—On the 20th ult., at Beaufort Villa, Cumberland-road, Bristol, Frederick George Blake, L.R.C.P.L., aged 27.

BUSFEILD.—On the 28th ult., at his residence, Booth Fold, Newchurch, Harcourt M'Leod Busfeild, Esq., M.D., in his 37th year.

CAMPBELL.—On the 26th ult., at Knock House, Sleat, Skye, suddenly, of cerebral apoplexy, Dr. Edward Ellice Campbell, M.B., C.M., Parochial Medical Officer, Sleat and Strath, much and deeply regretted, particularly by the poor, to whom he was an ever ready aid, aged 28.

O'DONNELL.—On the 15th ult., at Astaki Bay, Sea of Marmora, Joseph Francis O'Donnell, M.B., Surgeon, H.M.S. *Thunderer*.

REID.—On the 20th November, at Rosalie Beau Bassin, Mauritius, Francis Reid, M.D., C.M.G., Inspector of Hospitals, Chief Medical Officer and President of the General Board of Health, Mauritius.

RINGROSE.—On the 28th ult., at Wood-green, John Ringrose, M.R.C.S.E., aged 74.

ROBINSON.—On the 25th ult., at Charlotte-street, Christ-church, Surrey, John Robinson, M.B., aged 85.

SHORTO.—On the 22th ult., at West End, Southampton, James Shorto, M.R.C.S.E., aged 71.

SNAPE.—On the 25th ult., at Millbrook-road, Brixton, William Heathcote Snape, M.R.C.S.E., aged 66.

STABB.—On the 26th ult., at Montpelier-terrace, Ilfracombe, Thomas Stabb, aged 78.

STOCKER.—On the 25th ult., at Burnham, Bucks, James Stocker, M.R.C.S.E., late of Guy's Hospital, aged 73.

WADE.—At Belturbet, co. Cavan, William Maxwell Wade, F.R.C.S.I., aged 78.

WALKER.—On the 29th ult., at Hampton-terrace, Whalley Range, Manchester, John Walker, M.B., aged 30.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.*

BOOKS ETC. RECEIVED.

Dr. E. C. Seguin: A Series of American Clinical Lectures.
A. W. Blyth: A Manual of Practical Chemistry.
C. Gilbert Wheeler on Medical Chemistry.
Graham's Temperance Guide. 1879.
Dr. W. H. Spencer: The Chemical and Therapeutic Relations of Salicin and Salicylic Acid.
The Medical Temperance Journal. January.
The Magazine of Art. January.
Social Notes. December.

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Jan. 2nd, 1879.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb	Dry Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Dec. 27	29·41	S.W.	45	45	..	47	43	0·08	Overcast
„ 28	29·66	S.W.	41	42	..	50	37	0·04	Cloudy
„ 29	29·42	W.	41	43	..	54	39	0·13	Cloudy
„ 30	29·43	W.	52	54	..	55	41	0·11	Overcast
„ 31	29·58	S.W.	50	53	..	56	50	0·03	Cloudy
Jan. 1	29·80	WNW	47	49	..	51	47	0·15	Cloudy
„ 2	29·97	N.	32	33	..	..	51	0·94	Cloudy

Notes, Short Comments, and Answers to Correspondents.

THE PRINCESS MARY'S VILLAGE HOMES.

WE have received a communication of more than eleven foolscap sides from Mrs. Meredith, the able and energetic honorary manager of this institution, complaining very much of our criticisms, but approving of our advice as to present non-intercourse with the village children. We were at the outset of the inquiry well aware that the establishment is "certified" by the Home Office; but as it is the duty of the Press to "do and dare" much in way of criticism, we see no reason why even the Rev. Sydney Turner or Mr. Rogers should not be occasionally the subjects thereof, though we know them both as very able and accomplished officers. The writer of this letter speaks of "facts and variety of speculations" which have been mixed up "as a very indigestible pabulum." We can readily believe this to be the case; but, being conscious that the facts were not harshly stated, nor the speculations rashly rendered, we are content to leave both to be proved or disproved by independent judgments. Meanwhile, it is a matter for serious regret to know from Mrs. Meredith that the funds of this very admirable institution are, to use the words of the writer, "completely exhausted." We agree fully with our courteous correspondent "that compulsory domestic sanitation would be a greater boon to all classes than compulsory education," and we feel assured that our criticisms will not indicate, in the minds of many, other than practical hints for the sanitary improvement of a kind of home that should be much multiplied in the vicinity of the metropolis and of all large towns in the kingdom. Moreover, having a very lively and genuine interest in this establishment, we beg to recommend to the notice of those of our readers who are able and willing to afford financial aid a very pleasing sketch of the Homes that appeared in the last August number of *Good Words*.

Dr. W. Skene, (Dewsbury.)—Messrs. Cow, Hill, and Co., Cheapside.

"THE DIFFICULTIES OF A UNION MEDICAL OFFICER."

To the Editor of THE LANCET.

SIR,—In your issue of the 28th ultimo you published, under the above heading, a letter from Mr. George Fenton, of Great Smith-street, Westminster, who has been lately called upon by the Local Government Board to resign his position as a district medical officer of the St. George's Union.

With reference to the contents of that letter, I am directed by the guardians of the St. George's Union to state that the contentions between them and Mr. Fenton have not been that the latter was not a proper judge of the medicines and nourishment required by sick poor, but that their relieving officers were the proper persons to ascertain by whom the nourishment recommended should be provided.

It has been Mr. Fenton's persistent disregard of this distinction between his own duties and those of the relieving officers which has led to his enforced resignation, and it is obvious that, as the poor-rates can only be applied in relieving *destitution*, the guardians cannot properly discharge the trust committed to them if they ignore information carefully obtained for them by their relieving officers.

I am, Sir, your obedient servant,

THOMAS WORLOCK,
Clerk to the Guardians.

Mount-street, Grosvenor-square, Jan. 1st, 1879.

SUNDERLAND PROVIDENT DISPENSARY.

WHEN it was determined to restrict the number of medical men in connexion with this movement to six, only one applied, and he withdrew his application before the day of election. Those medical men who were interested in the experiment wished the number to be unrestricted. This feeling was partly met by making twelve the number. Under this rule there were nine applications. We shall be glad to receive further information of the working of the provident dispensary system in Sunderland, where it ought to succeed.

R. G. S.—There can be no legal claim to a fee for a post-mortem examination unless the coroner gives an order.

GUNSHOT WOUNDS OF THE HEART.

AT a late meeting of the New York Pathological Society an interesting report of a case of wound of the heart was presented. On the 7th July last a farm labourer was accidentally shot by a companion with a Smith and Wesson revolver. When seen by the medical man about an hour after the accident, he was in a state of partial collapse, remembering nothing of the circumstances of the shooting. The man rallied rapidly, without cough or expectoration, and in less than a fortnight was again at work, apparently quite well. He continued in good health until the 30th of August, when, after a full breakfast, he went to a field, and twenty minutes later he was found dead behind a plough. At the necropsy a small cicatrix near the left nipple was observed, and on opening the thorax a small cicatrix could be seen on the anterior border of the upper lobe of the left lung, in a line with the external scar, and under this was found an opening in the pericardium. On examining the heart, a small bullet was discovered in the left ventricle, covered with a delicate membrane, and an opening was traced through the upper portion of the septum, through the semilunar valve, lying against the septum, and through the aorta itself into the left auricle. All these openings were found in a line with a hole in the right ventricle. The fact of a man living fifty-four days with a wound directly through the aorta at its root is as remarkable as anything recorded in the history of wounds of the heart.

Mr. D. Singleton, (Ontario, Canada.)—We must decline.

THE BRITISH MEDICAL BENEVOLENT FUND.

To the Editor of THE LANCET.

SIR,—I ask permission to acknowledge in your columns the following subscriptions and donations to this Fund, sent, most of them, in response to an appeal in the form of a letter to the medical journals, which you were so kind as to print:—

	£	s.	d.
Dr. Bowles, Folkestone	3	3	0
Dr. Gibbings, Dalston (subscription)	2	2	0
Dr. Albert De Mierre, Torquay	5	5	0
John Colebrook, Esq.	10	10	0
Dr. Bacon, Cambridgeshire Asylum	10	0	0
Dr. Spottiswoode Cameron, Huddersfield	5	0	0
Dr. Geo. Fletcher, Earl Soham (sub.)	2	2	0
Dr. Robinson, Scots Fusilier Guards	2	2	0
Dr. E. Burd, Shrewsbury (sub.)	1	1	0
Ashley Gibbings, Esq.	2	2	0
Dr. Addy, Pendleton (sub.)	1	1	0
Dr. Coupland Taylor, Shrewsbury	2	2	0
Sir Thomas Watson	10	10	0
Dr. Frank, Cannes	20	0	0
H. Macpherson, Esq., per J. F. Monld, Esq.	5	0	0
The Sydenham District Medical Society, per Dr. Galton	52	10	0
Anonymous, per L. M.	0	10	0
J. Hughes, Esq., Middlewich (sub.)	1	1	0
Dr. Geo. Johnson, F.R.S.	5	5	0
Dr. Cahill, Albert-gate	5	5	0
Dr. Haviland, Leinster-gardens	10	0	0
Dr. G. C. Dale	0	10	0
Mr. Barron, Ryde	1	0	0
Anonymous	0	5	0

Dr. Bowles and Mr. Colebrook are old supporters of the Fund.

Other contributions have been sent to me for the poor widow whose case I related, and I have thus been enabled to give her two sums of 30*s.* and 45*s.*, instead of £1. A week of good food had made a perceptible difference in her appearance, and she had spent a few shillings out of the first advance in rescuing good clothing from pawn. Many cases quite as distressing as this come before the Committee every year, and it is with great thankfulness that I see the Fund, through the aid now given, prepared to meet the numerous applications awaiting the next meeting.

I remain, Sir, yours faithfully,

W. H. BROADBENT, M.D., Treasurer.

Seymour-street, Portman-square, Dec. 1878.

PAROCHIAL ETHICS.

THE Board of Guardians of Great Yarmouth met on the 28th ult., and declined to accede to a request made by Mr. Vores, one of their medical officers, that he should be permitted to change from the north to the south district, for reasons of general convenience and economy. No special reason was given for the course taken by the guardians, who, however, by a very large majority refused the request. The practical result of this course is that Mr. Vores and his colleague, Mr. Lettis, have both resigned, and Mr. Macnaughton, of Southsea, who had been elected a successor to Mr. Vores, having come over to Yarmouth, and heard the way in which his *confrères* had been treated, like a wise as well as honourable man, threw up the appointment, and shook the dust of Yarmouth off his feet with the least possible delay. The *Yarmouth Gazette* hints that politics are at the bottom of this curious parochial episode, and we can readily believe this, as party proclivities at both parliamentary and municipal elections wax very warm indeed at Great Yarmouth, much personal feeling is excited, and the town, if we mistake not, is among the disfranchised ones—a serious matter for a place with more than 40,000 inhabitants. Meanwhile, if Mr. Macnaughton's line of action were more often followed, this phase of parochial ethics would soon be among events of the past.

SCARLET FEVER IN BRENTFORD "SLUMS."

REFERENCE to sanitary matters does not usually find place in post-prandial Cricket Club speeches. We are not sure, however, whether reference to such matters, even on such an occasion, may not be hailed as satisfactory evidence of the growing public interest in sanitation. The *Richmond and Twickenham Times* recently published an article on "Brentford Slums," in which attention was usefully called to the unsatisfactory condition of much of the cottage property in the Local Government district of Brentford, a considerable portion of which is said to be in the hands of members of the Local Board. This article appears to have offended an ex-member of the said Board, who took the unusual opportunity when called upon to propose "The Press" as a toast at the annual dinner of a local Cricket Club, to take exception to the conduct of the press in publishing the article in question. It may be true that Brentford attracts a portion of the poorer working classes of Richmond, Kew, and Isleworth; but this supplies no extenuating circumstances if the Brentford Local Board allow overcrowding in unwholesome courts and alleys within their jurisdiction, which they possess ample powers to prevent. The speaker claimed for Brentford that the Registrar-General's Returns prove it to be almost the healthiest place in England. That its situation and soil are favourable to health, few will venture to deny. It is, however, still more decidedly beyond the region of dispute that, according to the Registrar-General's Returns, of 308 deaths recorded within the registration sub-district of Brentford during the nine months ending September last, no less than 71, or 23 per cent., resulted from the seven principal zymotic or preventable diseases. It is also unfortunately too true that 21 fatal cases of scarlet fever have occurred in Brentford since the beginning of October last. If the gentleman be a true friend to Brentford, he should rejoice that public attention has again been called to the "slums" of Brentford, which have recently suffered so severely from scarlet-fever fatality.

THE CONTAGIOUSNESS OF DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—In the recent outbreak of diphtheria in the Grand Ducal home in Hesse Darmstadt, the fact of the disease affecting all the members of the family, and yet not extending to any of the household, has been wondered at by the laity; while by the profession, or at least by some of its spokesmen, the fact has been taken as a proof that the spread of the disease has been by direct contact. It may be that this has been the method of infection; but the proof adduced is not convincing, and the certainty with which it has been assumed that a kiss was the fatal carrier of the disease to the devoted mother does not seem warranted.

It is remarkable in regard to diphtheria that it often spreads in none-sparing, deadly fashion in a family, and yet does not extend to other persons going freely about the patients. This is observed in places where kissing is a luxury scarcely indulged in, and in cases where all the apparent media of contagion are carefully guarded. The suggestion arising in one's mind is that the poison germ of diphtheria is modified by its habitat, becomes, in fact, a new variety growing out of, and specially adapted to, the constitution in which it has developed, and that this contagion finds in the kindred constitutions of brothers and sisters fit soil for its growth, while it is thrown off by stranger organisms to which it is unadapted. Thus sometimes whole families are cut off, or one parent alone is left, and servants in the house are unaffected.

The contrary of these cases has suggested the same idea. A female servant in a house is attacked with severe diphtheria, is attended by members of the family, but there is no spreading; the case remains solitary, sporadic. Is it so simply because of the non-proximity of kindred constitutions—fit fields for the seed to sow itself and grow? Another example: Two sisters are living with friends in small, confined rooms. One dies of diphtheria, the other is smitten; but the friends who wait upon them escape. A few such instances are not enough to establish the truth of a theory. They admit of other interpretations; but observation has led the writer to accept the above as a somewhat general and striking characteristic of diphtheria. If it is a real feature of the disease, it is not altogether a peculiar one. Other zymotic causes act more readily on certain persons. Some families seem peculiarly susceptible to the infection, say, of typhoid fever; but the suggestion as to diphtheria is that its poison is less of a specific nature than similar poisons, more the outcome of, and more affected by, the organism in which it has developed, and so less apt to find a congenial habitat in others. Still, *vires acquirit eundo*, and there is no doubt it becomes more specific, and less limited to a peculiar soil—i. e., more generally contagious—as it gathers strength. In the case of the Grand Ducal family it seems of little importance whether the disease was spread by direct somatic contact or by less evident contagion. In either case there must be material transference from the sick to the well. It is only a question of whether the poison is of such slender vitality, or so gross, that the air, which can carry epithelial, mucous, and other organic corpuscles, cannot be a vehicle for it; and while experiments have shown that actual contact is not always sufficient to produce the disease, few, probably, that have seen much of diphtheria will believe that it is always necessary. Practically, then, the conclusion here is that it is dangerous to publish or to confide in the belief that infection occurs only through contact, and the opinion is also stated that immediate relatives are in more danger of being infected, independently of their liability to greater exposure.

Your obedient servant,

December, 1878. M.D. Scot.

A Retired Master Mariner.—Dock-street may be found in any provincial Directory. We have no space to print the questions suggested; but our correspondent can, we suppose, readily obtain replies by addressing Mr. Birt, the patentee.

A MEDICAL ALMANAC.

FOR fourteen years Professor Paul Mantegazza, of the University of Padua, has presented the lay public with a Christmas-box in the shape of an almanac, dealing in a popular style with some great department of physiology or pathology. Fresh from the experimental laboratory or the clinical ward, the Professor sits down, in the cheerful spirit begotten of questions solved and duty done, to give his fellow-citizens the benefit of his scientific or practical experience; and the series of his notes, strung together by a connecting thread of narrative or argument, imperceptibly grows into a little book, which at the end of the year he presents to the non-medical world. In this way he has embodied in handy volumes of some 150 pages a succinct and wonderfully clear, while rigidly scientific, account of the physiology and pathology of the nervous system, of the skin, of the digestive apparatus, &c., which, if not specially instructive to the medical man, is yet well adapted to make the general reader the intelligent custodian of his own health. His "Almanacco igienico" for 1879, devoted to climate, is one of the very best of the series, and will enable many an English as well as Italian invalid to choose intelligently and satisfactorily the health-resort best adapted to his special case. Professor Mantegazza has the courage to deviate from the beaten track of the invalid tourist, and calls attention to many a spot where the victim of overwork or of long-continued dietetic error can redeem the unfortunate past, and husband or recruit himself for a better future. The Almanac is published by Brigola, of Milan, and costs fifty centimes.

Mr. Bradley.—We shall be happy to receive the communication proposed.

"A RARE COMPLICATION IN LABOUR."

To the Editor of THE LANCET.

SIR,—In your issue of Dec. 7th I see a letter from Drs. G. H. Boyland and J. Robert Ward, headed as above. I was hoping last week to have seen some able answer to it in your journal; but none being forthcoming, I beg to give you my idea of the cases cited.

It seems to me doubtful that a few circular fibres of the uterus contracting could offer any appreciable resistance to an ordinary extracting force applied by the forceps; but when "three strong men" are stated to have pulled, it shows me at once that the circular fibres of the uterus were not the only opposing force. I have been practising midwifery for some ten years, but have never considered myself justified in exerting my strength to the utmost in the use of forceps. From what I can learn of the cases from the short account in THE LANCET, I believe that the uterus itself was slightly involuted; the involution being caught between the pelvis and the fœtal head, thus preventing delivery. I believe my theory to be correct, especially as they describe the fundus of the uterus as being soft and flaccid.

The principal reason of my writing this letter is that I consider an article advocating such force in extraction by forceps should not go unanswered; and, again, I should like to suggest in such cases an earlier resort to craniotomy, as I see that each of these terminated fatally.

I am, Sir, faithfully yours,

Wincanton, Dec. 18th, 1878. R. B. WYBRANTS, M.A., M.R.C.S.

P.S.—Whilst on the subject of craniotomy, I might remark that I have had made a "corkscrew," ten inches in length, with a bulbous extremity of wood, which will, I believe, be more efficacious in extraction of the fœtus after perforation than the crotchet or craniotomy forceps. My idea is to insert it in the foramen magnum, and give about two turns. I should be pleased to send it to you for your opinion on it.

EXETER AND ITS SANITARY CONDITION.

THE high rate of infant mortality constantly prevailing in Exeter, and the recurring liability of the city to severe epidemics of zymotic disease, have long spoken eloquently of the unsatisfactory sanitary condition of that ancient city, fortunately now engaging the attention of the Town Council, its urban sanitary authority. An inquest was recently held in this city with regard to the death of an old man, who, although found dead in bed, was said to have died from "exposure to cold." In explanation of this apparent anomaly, it was in evidence that the house in which the deceased resided had not been repaired for forty years; the medical witness describing the house as wretched and dilapidated, and scarcely fit for habitation. Exeter is still, so far as we know, practically without a medical officer of health, so that the sanitary condition of the city, deposed to at the recent inquest, which accounts for its unsatisfactory mortality statistics, seems to present little chance of immediate improvement.

"COMPLIMENTS OF THE SEASON."

To the Editor of THE LANCET.

SIR,—I trust the enclosed clipping from the *Era* of Dec. 29th, 1878, has been inserted without the sanction of the eminent names mentioned:—

"Sir Julius Benedict has very recently undergone an operation for cataract of the eyes, the said operation being performed by the famous oculists, Mr. George Critchett, and his son, Mr. George Anderson Critchett, whose marvellous skill has brought them almost world-wide fame. The patient, we understand, is making favourable progress, but will be compelled to remain in a darkened room for about a fortnight."

Surely such world-renowned ophthalmologists as the Messrs. Critchett must blush at such fulsome puffery.

Your obedient servant,

December 28th, 1878. A STRUGGLING OCULIST.

THE AGRA MEDICAL MISSION.

WE learn from the *Delhi Gazette* that the Agra Medical Missionary Training Institution, projected some years ago, is about to commence the work it was designed to promote. It is proposed that the institution shall receive from forty to fifty male boarders, native Protestant Christians of all denominations, who will receive a regular medical education in the Agra Medical College, with a view of graduating there as first-class native doctors. Concurrently with their medical training, these boarders will be required to devote a portion of their time to training for their special missionary labours, so that at the completion of their studies they may go forth to the world fully qualified both for their medical and their missionary duties. The several Missionary Societies sending boarders to the institution will be expected to provide food for them during their residence there, at a cost, it is believed, of twelve shillings (six rupees) per month each boarder. It is proposed also that a class of women shall be established for instruction in missionary labours, under special arrangement. Dr. Humphry, late of the American Episcopal Methodist Mission, has been appointed Superintendent of the institution.

DETACHMENT OF THE RETINA.

To the Editor of THE LANCET.

SIR,—Dr. Bralley's letter in THE LANCET of Dec. 21st is gratifying to myself personally, and highly satisfactory in a scientific point of view. I was correct in stating that the claim set up on Sichel's behalf, as having originated the operation in 1859, rests upon hearsay, and will not be borne out by recorded facts. I could speak confidently with regard to it, as I was with Sichel in that year, and am familiar with his operation. But it appears from Dr. Bralley's letter that the operation of puncturing the sclerotic, which Sichel performed in a case of chronic scrofulous engorgement of all the tissues of the eye, after having been dormant for nineteen years, was revived by Professor Alf. Graefe, of Halle, and Dr. Pufahl for detachment of the retina in December of last year; four of these successful cases being reported in the *Centralblatt für praktische Augenheilkunde*, a journal the name of which, I regret to say, is quite unknown to me. An attentive examination, however, will show that my operation, described in THE LANCET of October 12th, is quite different from that performed by Sichel, and now adopted by Professor Graefe and his school.

Everyone knows that subretinal dropsy can be reached through the sclerotic. Why has the operation been so long neglected? Evidently because when a straight incision is made into the sclerotic there is the risk—1st. That the cut edges will not unite. 2nd. Loss of vitreous may take place during the operation, and hyaloid shreds from healthy prolapsed vitreous may intervene between the cut edges, and hence choroidal staphyloma and subsequent softening of the eye are the natural results. What increases the danger is, that the instrument having to pass through the conjunctiva and a mass of loose binding and fibrous tissues, precision becomes very difficult. 3rd. Part of the fluid when evacuated will follow the course of the knife; but some of it is sure to spread, and infiltrate the conjunctiva and subjacent structures—a very undesirable complication. These are exigencies we must reckon with in this operation; they are so serious that they deterred me from ever adopting it. Indeed we are informed by Dr. Bralley that in Graefe's operation "the lower half of the conjunctiva was filled with serous fluid." Now, my operation is not a simple thrust under cover, but every part of it is so arranged as to avoid the eventualities just referred to. 1st. By laying bare the sclerotic, and keeping the soft parts separated, we can reach the dropsy with greater precision. 2nd. The sclerotome being introduced obliquely, on its withdrawal a kind of valve is formed by the scleral fibres to prevent prolapse of vitreous, or choroidal hernia. 3rd. The fluid can be properly evacuated without risk of conjunctival infiltration. The ligature still further secures the healing of the wound. I submit, therefore, that this is a new operation, no imitation of Sichel or anybody else.

But there is one aspect of the question which rises far above personal considerations; it is the prospect of our having found a new point of departure for the cure of retinal dropsy. The success of the operation through the sclerotic, which now comes before the profession, recommended by the concurrent and independent experience of Professor Graefe and his colleagues in the one form, and by myself in another, will more readily secure for it a fair trial.

I am, Sir, yours faithfully,

Glasgow, Dec. 23rd, 1878. J. R. WOLFE.

ALCOHOLISM.

To the Editor of THE LANCET.

SIR,—Contraction of the pupils as a symptom of acute alcoholism is utterly untrustworthy. A few years ago, when I was a Poor-law surgeon in London, I saw at least a dozen cases of men who were "dead drunk" from tapping spirit-casks in the docks, and sucking the contents through straws. Referring to my notes, I find that in four cases both pupils were contracted to the size of a pin's-head; five were fully dilated; two were moderately dilated; and in one case the left pupil was contracted, and the right dilated. The smallest quantity of spirit taken in any one of these cases was about a pint, and the most about three pints. So far as I could ascertain, the quantity of spirit taken had no constant effect in determining the amount of contraction or dilatation. There was no doubt about the diagnosis, and all the men, after being treated with the stomach-pump, recovered quickly.

In conclusion, I must add that the case which exhibited during alcoholism the unequal-sized pupils, no longer did so when recovery had taken place. I venture to think that these cases are conclusive proof that contracted pupils are not of use in the diagnosis of alcoholism.

Yours faithfully,

Manchester, Dec. 17th, 1878. H. STANLEY GALE.

THE following are names of contributors to our columns during the present year, in addition to those already published:—

Dr. DAY, London.
Dr. W. JOHNSTON, Leicester.
Mr. G. J. PERRY, Honorary Surgeon to the Melksham Cottage Hospital.
Mr. E. RICKARDS, M.A. Oxon., Honorary Physician to the General Hospital, Birmingham.
Mr. W. J. SMITH, Surgeon to the Seamen's Hospital, Greenwich.
Mr. J. B. STORY, Surgeon to St. Mark's Ophthalmic Hospital, Dublin.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to call attention through your columns to a case of real distress?

Francis Benj. Dalton, M.R.C.S. 1831, L.S.A. 1829, has become reduced, partly through losses, and partly through ill-health, to a condition of absolute poverty. At the present moment, and for some weeks past, he has been in-patient of St. George's Hospital (where he was formerly a pupil), under the care of Mr. Pollock, who has operated upon him for malignant disease. During this time his wife, who is most anxious to procure employment, has been living upon charity; and when Mr. Dalton leaves the hospital, unless some friends will assist, I see no alternative but the union. I have already obtained a grant for him from the British Medical Benevolent Fund, which, together with a few other subscriptions, I doled out in weekly payments for his benefit as long as the money lasted. Should any of your numerous readers feel disposed to lend a helping hand, I shall be most happy to receive and acknowledge subscriptions of any amount, and to see that the money is duly and judiciously expended for his sustenance and comfort. Mr. Pollock has kindly promised to give £5 5s., with which I would desire to head the list of subscriptions, and I sincerely hope that many will add what they can.

George Pollock, Esq.	£5	5	0
Cæsar Hawkins, Esq.	5	0	0
H. Cooper Rose, M.D.	5	5	0

I am, Sir, yours &c.,

Hampstead, Dec. 1878. H. COOPER ROSE, M.D.

FEVER AT CAYTHORPE.

To the Editor of THE LANCET.

SIR,—I notice in your issue of December 21st a letter from Dr. Barton, of Fulbeck, on the above-named subject, and I shall be obliged if you will allow me to point out some statements in it which are scarcely in accordance with the facts of the case.

For the sake of clearness, I may mention that the place where the cases of typhoid fever which are mentioned occurred is known as Packe's-yard. Dr. Barton states that "the cause is easily found in the quality of the drinking-water, and open sewers at the doors of each of the cottages." The water is polluted; but there is not an open sewer at the door of any cottage in the yard. I am surprised to see him assert that "the sanitary officers have endeavoured to have matters rectified, but seem to have little power to enforce their recommendations." To show that this assertion cannot be supported, I must ask to be allowed to give the following particulars.

The sanitary state of the yard in question was very bad; but, *on the recommendation of the sanitary officers*, the following permanent improvements and preventive measures have been cheerfully carried out by the agent for the property, some of them previously to, and others after, the commencement of the outbreak of the fever:—A glazed earthenware pipe drain and stoneware gully traps were put down the whole length of the yard in the early part of last summer; a pigsty, which abutted on one of the cottages was removed at the same time; some other pigsties and a small offensive crew-yard, which were situated near the pump, were done away with altogether in October, the place being afterwards filled up and made level with the surrounding ground; a dilapidated privy, which was about twenty yards from the pump on the opposite side of the crew-yard, was repaired, and a thoroughly water-tight vault was made to it in November. I analysed some water from the pump, and found it to be very impure. Accordingly an order was given to the agent to close the pump, and he was recommended to provide the yard with a supply of good water by leading it in a cart from elsewhere. The pump has been closed, and the suggested temporary water-supply has been given. He was asked to pump the well out, and puddle it round with clay. This has also been done. The other privies in the yard were ordered to be emptied and disinfected. This was done. The sanitary inspector distributed disinfectants to all the houses where there has been fever, and has had them put down public and private drains.

The bad sanitary state of the village has engaged our attention for some time past, and has been reported by us to the sanitary authority; but we have not yet definitely urged them to have it sewered or supplied with water for several reasons, amongst which may be mentioned the fact that Frieston, a hamlet to the village, has been sewered, and a new school has had to be built in the village, whereby a very considerable expense has been thrust on the inhabitants, and it appeared that any additional burden would be badly borne during these exceedingly unprosperous times. Hence it is that the matter has remained in abeyance up to this time; but the yard in question has been so improved that little else will be required than a junction with the new public sewer when it is made. Possibly these alterations may make the pump-water fit for use after a time; but if not, some other will have to be provided.

I think, Sir, that these few facts will serve to clear the sanitary inspector and myself from the charge of incompetence, needlessly, as we think, publicly made against us by Dr. Barton in the columns of your paper.

I am, Sir, your obedient servant,

ALFRED ASHBY,
Medical Officer of Health, Grantham, Newark, and Sleaford Combined Sanitary District.

Grantham, Dec. 23rd, 1878.